

**Kerr-McGee Oil & Gas OnShore LP** 1999 Broadway, Suite 3700, Denver, Colorado 80202 303-296-3600 • Fax 303-296-3601

February 28, 2007

Ms. Diana Mason Division of Oil, Gas and Mining P.O. Box 145801 Salt Lake City, UT 84114-6100

RE: State 1021-32I

T10S-R21E

Section 32: NESE 2208' FSL, 1231' FEL Uintah County, Utah

Dear Ms. Mason:

Kerr-McGee Oil & Gas Onshore LP, formerly known as Westport Oil and Gas Company, L.P. has submitted a permit to drill the captioned well to test the Wasatch and Mesaverde formations. The well is located at an exception location to State Rule 649-3-2 (State Wide). The well location was moved for topographic reasons. Kerr-McGee owns 100% of the leasehold within 460 feet of the exception location of the offset lands and has no objection to the exception location.

Kerr-McGee requests your approval of this exception location. If you have any questions, call me at 720-264-2618. Thank you for your assistance.

Sincerely,

W. Chris Latimer, CPL

U. And Sal

Senior Landman

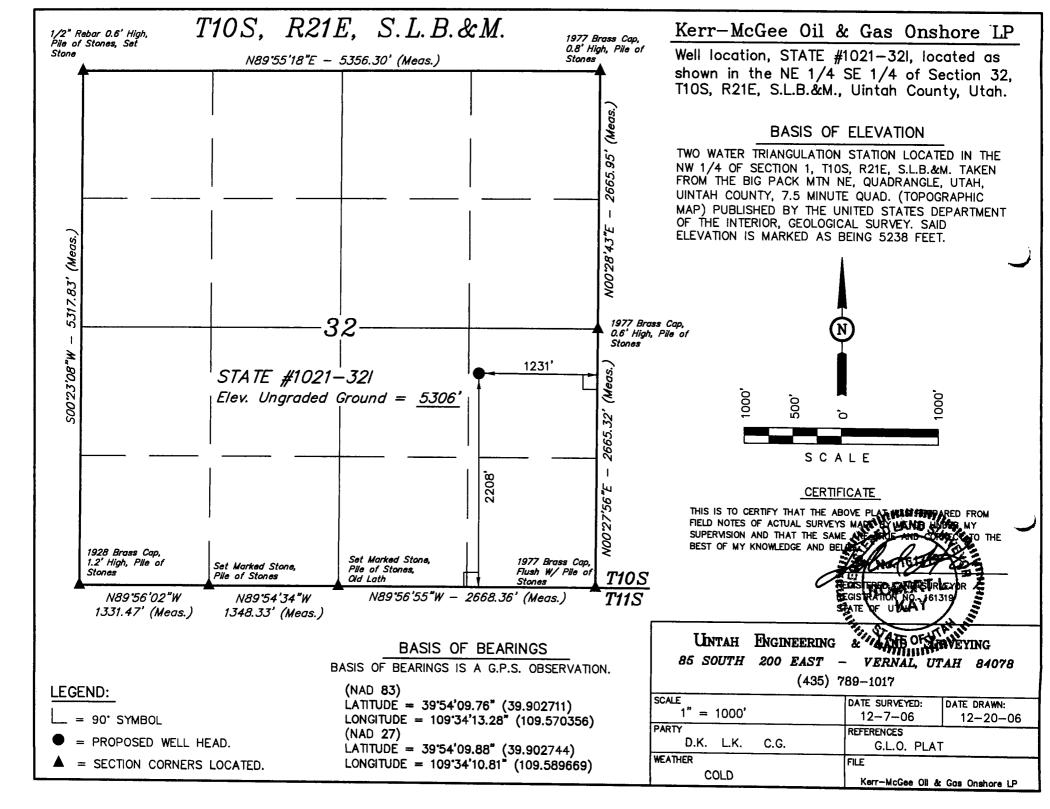
cc: Raleen White

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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AMENDED REPORT	
(highlight changes)	

APPLICATION FOR PERMIT TO DRILL						ML-21577	State		
1A. TYPE OF WO	DRK: DF	RILL 🔽	REENTER [	] DEEPEN			7. IF INDIAN, ALLOTTEE OR	RIBE NAME:	
B. TYPE OF WE	ILL: OIL 🗌	gas 🗹	OTHER	SIN	GLE ZONE MULTIPLE ZON	NE 🔽	8. UNIT or CA AGREEMENT N	IAME:	
2. NAME OF OPE	RATOR: SEE OIL & C	SAS ONSH	ORE L.P.				9. WELL NAME and NUMBER STATE 1021-321		
3. ADDRESS OF 1368 S 120		CITY VERN	IAL STA	TE UT ZIP 84	PHONE NUMBER: (435) 781-7024	ļ	10. FIELD AND POOL, OR WILDCAT: NATURAL BUTTES		
4. LOCATION OF	WELL (FOOTAGE	S/	622276	_			11. QTR/QTR, SECTION, TOV MERIDIAN:		
AT SURFACE:	2208'FSL,	IZƏLFEL		22.1	39. 902750		NESE 32 105	3 21E	
AT PROPOSED	PRODUCING ZON	IE:	44177.	23 Y	39.90275D 109.549679				
			REST TOWN OR PO				12. COUNTY:	13. STATE: UTAH	
	LES SOUTH		·				UINTAH		
1231'	O NEAREST PROPI	ERTY OR LEASE I	LINE (FEET)	16. NUMBER O	F ACRES IN LEASE: 640.00		MBER OF ACRES ASSIGNED	40.00	
	NEAREST WELL R) ON THIS LEASE		PLETED, OR	19. PROPOSED			ND DESCRIPTION:		
REFER TO	О ТОРО С				9,050	RL	B0005237		
	(SHOW WHETHER	R DF, RT, GR, ETC	D.):	22. APPROXIMA	ATE DATE WORK WILL START:	23. ES	TIMATED DURATION:		
5306'GL	<u>-</u> .								
24.	_		PROPOS	ED CASING A	ND CEMENTING PROGRAM				
SIZE OF HOLE	CASING SIZE, C	GRADE, AND WER	SHT PER FOOT	SETTING DEPTH	CEMENT TYPE, QU	JANTITY, Y	(IELD, AND SLURRY WEIGHT		
12 1/4"	9 5/8	H-40	32.3#	1,800	265 SX CLASS G	1.18 Y	IELD 15.6 PPG		
7 7/8"	4 1/2	I-80	11.6#	9,050	1920 SX 50/50 POZ	1.31 Y	IELD 14.3 PPG		
25.			<del>-</del>	ATTA	CHMENTS				
VERIFY THE FOL	LOWING ARE ATT	ACHED IN ACCO	RDANCE WITH THE I	JTAH OIL AND GAS C	ONSERVATION GENERAL RULES:				
WELL PL	AT OR MAP PREPA	ARED BY LICENSI	ED SURVEYOR OR E	NGINEER	COMPLETE DRILLING PLAN				
<b>V</b> EVIDENC	E OF DIVISION OF	WATER RIGHTS	APPROVAL FOR US	E OF WATER	FORM 5, IF OPERATOR IS P	ERSON O	R COMPANY OTHER THAN TH	IE LEASE OWNER	
NAME (PLEASE	PRINT) SHEIL	A UPCHEG	6O		TITLE SENIOR LAN	ID ADN	MIN SPECIALIST		
SIGNATURE	Mille	l M	alala		DATE 3/13/2007				
(This space for Sta	te use only)	<u> </u>	0	,	Approved by the				
					Litah Division of			ΕD	
ADIAH PADED 10	WALLES 4	3-047-	30124		Oil, Gas and Mining	l	RECEIV		
API NUMBER AS	SIGNED:	VT/-	<del>171 1</del>	· · · · · ·	APPROVAL:		MAR 1 6 2	<b>J07</b>	
				_	N. 75.87	*			



### STATE 1021-32I NE/SE SEC. 32, T10S, R21E UINTAH COUNTY, UTAH ML-21577

### **ONSHORE ORDER NO. 1**

### DRILLING PROGRAM

### 1. <u>Estimated Tops of Important Geologic Markers:</u>

<u>Formation</u>	<u>Depth</u>
Uinta	0- Surface
Green River	911'
Top of Birds Nest Water	1156'
Mahogany	1682'
Wasatch	4071'
Mesaverde	6902'
MVU2	7908'
MVL1	8422'
TD	9050'

### 2. Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

Substance	<u>Formation</u>	<u>Depth</u>
	Green River	911'
Water	Top of Birds Nest Water	1156'
	Mahogany	1682'
Gas	Wasatch	4071'
Gas	Mesaverde	6902'
Gas	MVU2	7908'
Gas	MVL1	8422'
Water	N/A	
Other Minerals	N/A	

### 3. <u>Pressure Control Equipment</u> (Schematic Attached)

Please refer to the attached Drilling Program.

### 4. **Proposed Casing & Cementing Program**:

Please refer to the attached Drilling Program.

### 5. **Drilling Fluids Program:**

Please refer to the attached Drilling Program.

### 6. Evaluation Program:

Please refer to the attached Drilling Program.

### 7. Abnormal Conditions:

Maximum anticipated bottomhole pressure calculated at 9050' TD, approximately equals 5611 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3620 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

### 8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

### 9. Variances:

Please refer to the attached Drilling Program.

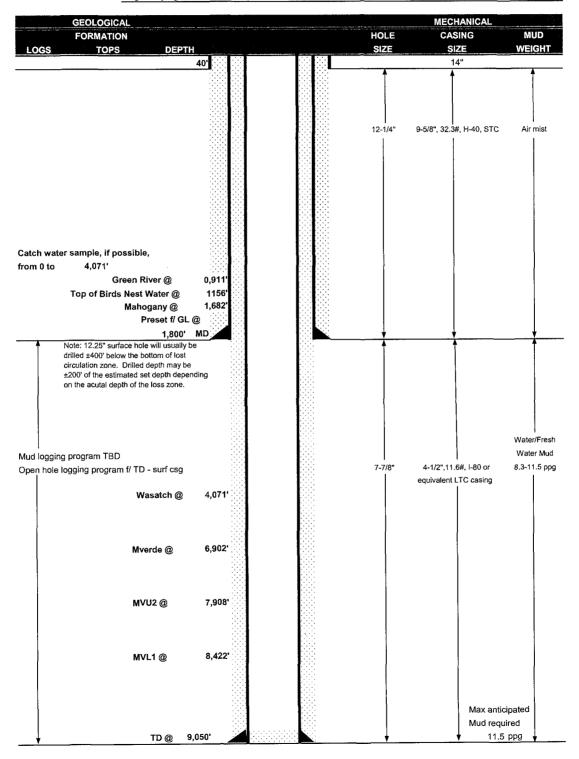
### 10. Other Information:

Please refer to the attached Drilling Program.



## KERR-McGEE OIL & GAS ONSHORE LP <u>DRILLING PROGRAM</u>

COMPAN	NY NAME	KERR-McGEE OIL & GAS C	NSHORE LP	DATE	March 14	, 2007		
WELL NA	AME -	STATE 1021-32I		TD	9,050'	MD/TVD		
FIELD	Natural Butte	es COUNTY Ui	ntah STATE	Utah	ELEVATION	5,306' GL	KE	3 5,321'
SURFAC	E LOCATION	NE/SE SEC. 32, T10S, R	21E 2208'FSL, 123	1'FEL			BHL	Straight Hole
		Latitude: 39.902711	Longitude: 109	.570356				
OBJECT	IVE ZONE(S)	Wasatch/Mesaverde						
ADDITIO	NAL INFO	Regulatory Agencies: UE	OOGM (SURF & MIN	NERALS),Tri	-County Health	n Dept.		





### KERR-McGEE OIL & GAS ONSHORE LP

### DRILLING PROGRAM

### CASING PROGRAM

							_		DESIGN FACTORS	
	SIZE	IN	TERV/		WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	14"		0-40'			<u> </u>				
								2270	1370	254000
SURFACE	9-5/8"	0	to	1800	32.30	H-40	STC	0.66******	1.63	4.99
							ļ	7780	6350	201000
PRODUCTION	4-1/2"	0	to	9050	11.60	1-80	LTC	2.27	1.17	2.19
							<u> </u>			

- 1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)
- 2) MASP (Prod Casing) = Pore Pressure at TD (.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD =

11.5 ppg)

.22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)

MASP 3421 psi

1A3F 3421 psi

\*\*\*\*\*\*\*\* Burst SF is low but csg is much stronger than formation at 2000'. EMW @ 2000' for 2270# is 21.8 ppg or 1.13 psi/ft

### CEMENT PROGRAM

	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE LEAD	500	Premium cmt + 2% CaCl	215	60%	15.60	1.18
Option 1		+ .25 pps flocele				
TOP OUT CMT (1)	200	20 gals sodium silicate + Premium cmt	50		15.60	1.18
		+ 2% CaCl + .25 pps flocele				
TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE		NOTE: If well will circulate water to s	urface, op	tion 2 will b	e utilized	
Option 2 LEAD	1500	Prem cmt + 16% Gel + 10 pps gilsonite	170	35%	11.00	3.82
		+.25 pps Flocele + 3% salt BWOC				·
TAIL	500	Premium cmt + 2% CaCl	180	35%	15.60	1.18
•		+ .25 pps flocele				
TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION LEAD	3,570'	Premium Lite II + 3% KCI + 0.25 pps	390	60%	11.00	3.38
		celloflake + 5 pps gilsonite + 10% gel				
		+ 0.5% extender				
TAIL	5,480'	50/50 Poz/G + 10% salt + 2% gel	1530	60%	14.30	1.31
		+.1% R-3				

<sup>\*</sup>Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

### FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.	
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.	

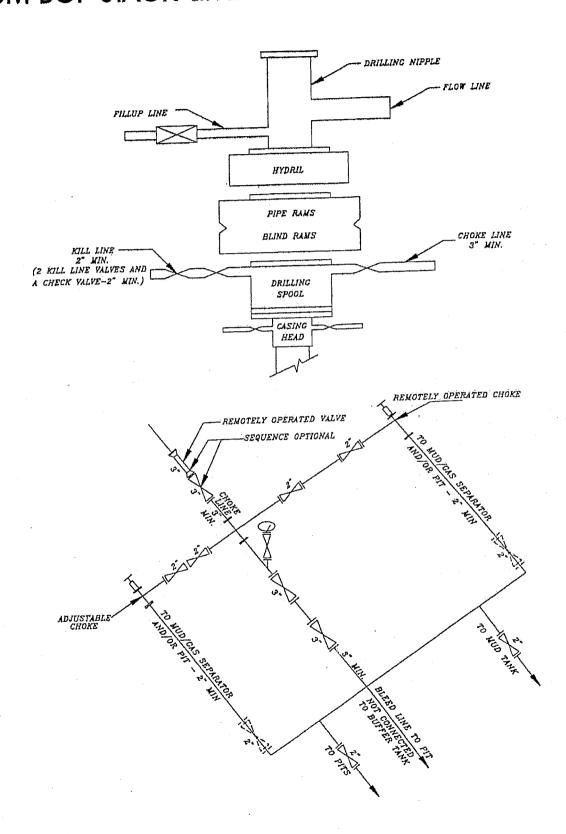
### ADDITIONAL INFORMATION

DATE:
nitoring will be utililzed.
rig floor at all times. Kelly to be equipped with upper
si) prior to drilling out. Record on chart recorder &
o drilling out.

DRILLING ENGINEER:		DATE:
	Brad Laney	
DRILLING SUPERINTENDENT:		DATE:
	Randy Bayne	

<sup>\*</sup>Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

# 5M BOP STACK and CHOKE MANIFOLD SYSTEM



### STATE 1021-32I NE/SE SEC. 32, T10S, R21E Uintah County, UT ML-21577

### ONSHORE ORDER NO. 1

### **MULTI-POINT SURFACE USE & OPERATIONS PLAN**

### 1. Existing Roads:

Refer to Topo Map A for directions to the location.

Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

Refer to Topo Maps A and B for location of access roads within a 2 mile radius.

All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.

### 2. Planned Access Roads:

Approximately  $0.1 \pm 0.1$  miles of new access road is proposed. Refer to Topo Map B for the location of the proposed access road.

The upgraded and new portions of the access road will be crowned and ditched with a running surface of 18 feet and a maximum disturbed width of 30 feet. Appropriate water control will be installed to control erosion.

Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities were determined at the on-site.

The access road was centerline flagged during time of staking.

Surfacing material may be necessary, depending upon weather conditions.

Surface disturbance and vehicular traffic will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.

### 3. Location of Existing Wells Within a 1-Mile Radius:

Please refer to Topo Map C.

### 4. Location of Existing & Proposed Facilities:

The following guidelines will apply if the well is productive.

All production facilities will be located on the disturbed portion of the well pad and at a minimum of 25 feet from the toe of the back slope or the top of the fill slope.

A dike will be constructed completely around those production facilities which contain

fluids (i.e., production tanks, produced water tanks, and/or heater/treater). These dikes will be constructed of compacted subsoil, be impervious, hold 100% of the capacity of the largest tank, and be independent of the back cut.

All permanent (on-site six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the five state Rocky Mountain Inter-Agency Committee.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The required color is Carlsbad Canyon, standard color number 2.5Y 6/2.

Any necessary pits will be properly fenced to protect livestock and prevent wildlife entry.

Approximately 503' +/- of 4" steel pipeline is proposed from the location to an tie-in point. Refer to Topo Map D.

### 5. Location and Type of Water Supply:

Water for drilling purposes will be obtained from Dalbo Inc.'s underground well located in Ouray, Utah, Sec. 32, T4S, R3E, Water User Claim #43-8496, Application #53617.

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

### 6. Source of Construction Materials:

Surface and subsoil materials in the immediate area will be utilized.

Any gravel will be obtained from a commercial source.

### 7. Methods of Handling Waste Materials:

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids, including salts and chemicals, will be contained in the reserve pit. Upon termination of drilling and completion operations, the liquid contents of the reserve pit will be removed and disposed of at an approved waste disposal facility within 120 days after drilling is terminated.

The reserve pit will be constructed on the location and will not be located within natural drainage, where a flood hazard exists or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not leak, break, or allow discharge of liquids.

A plastic reinforced liner and felt will be used, it will be a minimum of 20 mil thick, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit.

Any spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site.

A chemical porta-toilet will be furnished with the drilling rig.

Garbage, trash, and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. No trash will be burned on location.

All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig.

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

Any produced water from the proposed well will be contained in a water tank and will then be hauled By truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S, R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E.

### 8. Ancillary Facilities:

None are anticipated.

### 9. Well Site Layout: (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

The reserve pit will be lined, and when the reserve pit is closed, the pit liner will be buried below plow depth.

All pits will be fenced according to the following minimum standards:

39 inch net wire will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.

The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.

Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance

between any 2 fence posts shall be no greater than 16 feet.

All wire shall be stretched, by using a stretching device, before it is attached to corner posts.

The reserve pit fencing will be on three sides during drilling operations, and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

Location size may change prior to the drilling of the well due to current rig availability. If the proposed location is not large enough to accommodate the drilling rig the location will be resurveyed and a Form 9 shall be submitted.

### 10. Plans for Reclamation of the Surface:

Producing Location:

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, materials, trash, and debris not required for production.

Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1.

A plastic, nylon reinforced liner will be used, it shall be torn and perforated before backfilling of the reserve pit.

Before any dirt work associated with location restoration takes place, the reserve pit shall be as dry as possible. All debris in it will be removed. Other waste and spoil materials will be disposed of immediately upon completion of operations.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 90 days from the date of well completion, weather permitting.

To prevent surface water (s) from standing (ponding) on the reclaimed reserve pit area, final reclamation of the reserve pit will consist of "mounding" the surface three feet above surrounding ground surface to allow the reclaimed pit area to drain effectively.

Upon completion of backfilling, leveling, and recontouring, the stockpiled topsoil will be spread evenly over the reclaimed area(s).

Dry Hole/Abandoned Location:

Abandoned well sites, roads, and other disturbed areas will be restored as near as practical to their original condition. Where applicable, these conditions include the re-establishment of irrigation systems, the re-establishment of appropriate soil conditions, and re-establishment

of vegetation as specified.

All disturbed surfaces will be recontoured to the approximate natural contours, with reclamation of the well pad and access road to be performed as soon as practical after final abandonment.

Reseeding operations will be performed after completion of other reclamation operations.

### 11. Surface Ownership:

SITLA 675 East 500 South, Suite 500 Salt Lake City, UT 84102

### 12. Other Information:

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, the approved Plan of Operations, and any applicable Notice of Lessees. The Operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

The Operator will control noxious weeds along Rights-Of-Way for roads, pipelines, well sites, or other applicable facilities.

A Class III archaeological survey will be submitted when report becomes available.

This location is not within 460' from the boundary of the Natural Buttes Unit, nor is it within 460' of any non-committed tract lying within the boundaries of the Unit.

### 13. <u>Lessee's or Operators's Representative & Certification</u>:

Sheila Upchego Senior Land Admin Specialist Kerr-McGee Oil & Gas Onshore LP 1368 South 1200 East. Vernal, UT 84078 (435) 781-7024 Randy Bayne Drilling Manager Kerr-McGee Oil & Gas Onshore LP 1368 South 1200 East Vernal, UT 84078 (435)781-7018

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by State Surety Bond #RLB0005237.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Sheila Upchego

3/14/2007

Date

### Kerr-McGee Oil & Gas Onshore LP

## STATE #1021-32I SECTION 32, T10S, R21E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; TURN LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 15.6 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 1.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH: TURN RIGHT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 0.15 MILES TO THE BEGINNING OF THE PROPOSED ACCESS FOR THE #1021-32N TO THE EAST; FOLLOW ROAD FLAGS IN AN EASTERLY, THEN NORTHEASTERLY DIRECTION APPROXIMATELY 0.2 MILES TO THE PROPOSED #1021-32N AND THE BEGINNING OF THE PROPOSED ACCESS FOR THE #1021-32H TO THE NORTHEAST; FOLLOW ROAD FLAGS IN A NORTHEASTERLY DIRECTION APPROXIMATELY 0.6 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE SOUTH; FOLLOW ROAD FLAGS IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 0.1 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 48.25 MILES.

### Kerr-McGee Oil & Gas Onshore LP

STATE #1021-32I

LOCATED IN UINTAH COUNTY, UTAH SECTION 32, T10S, R21E, S.L.B.&M.

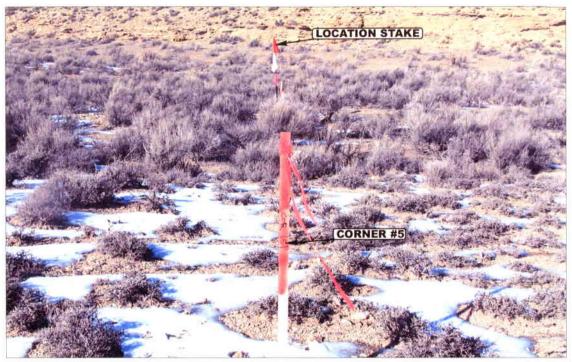


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHWESTERLY

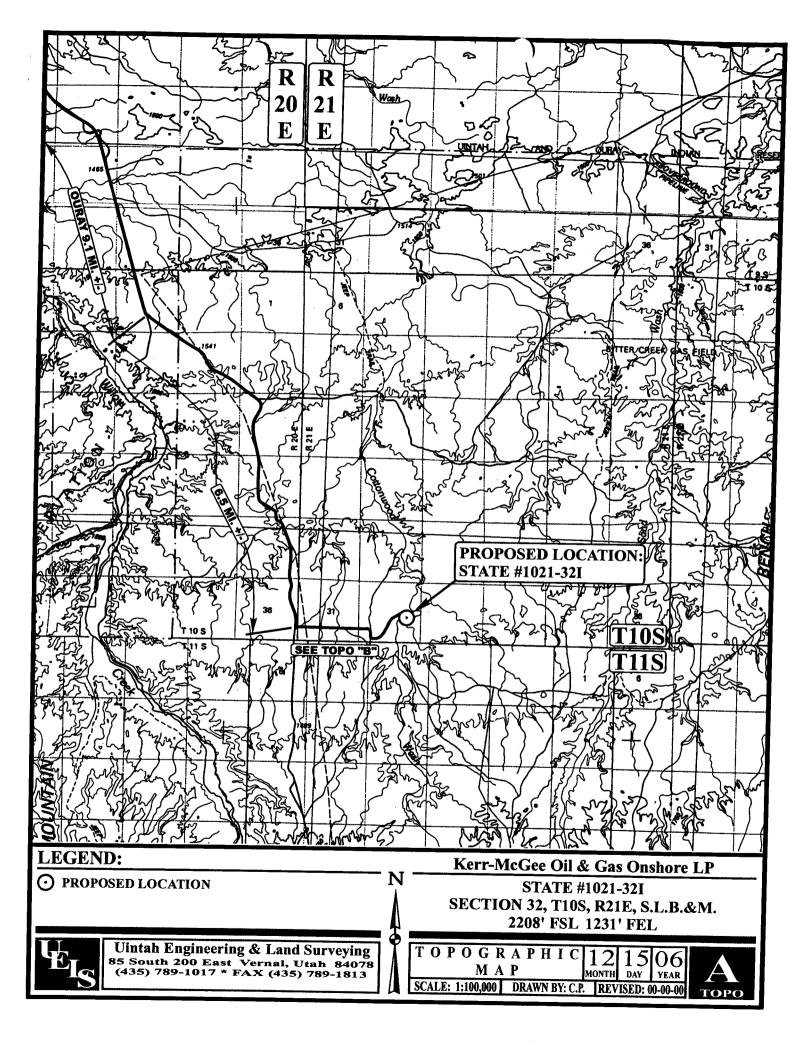


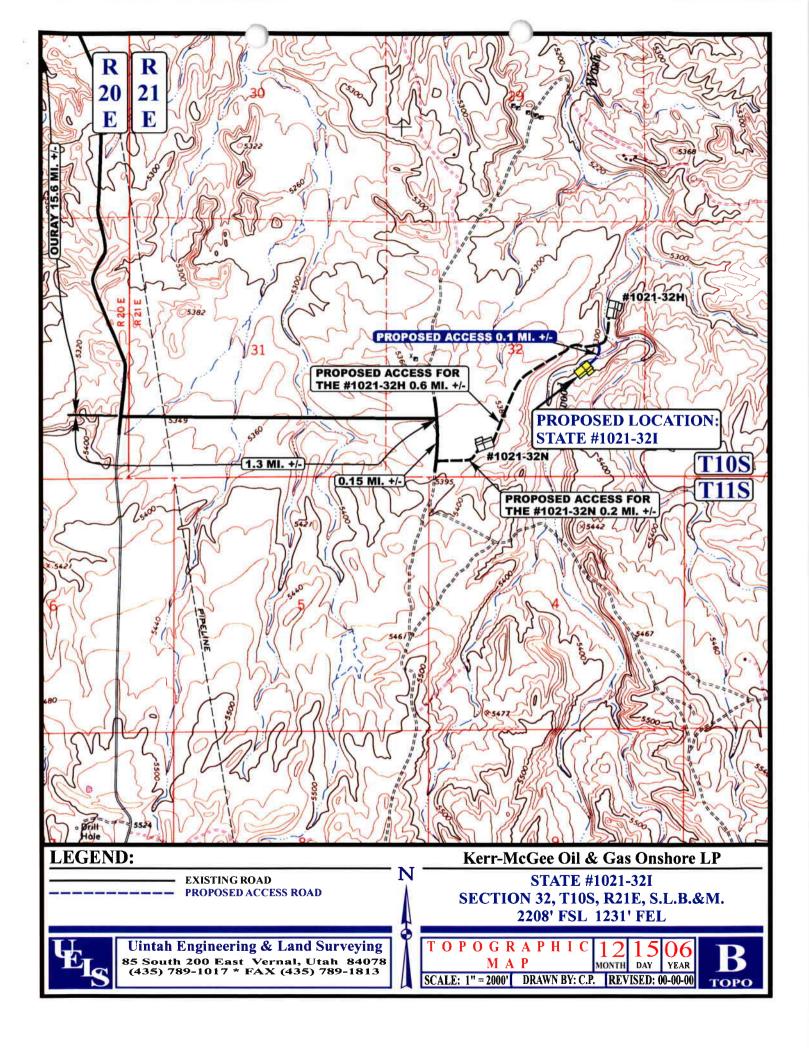
PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

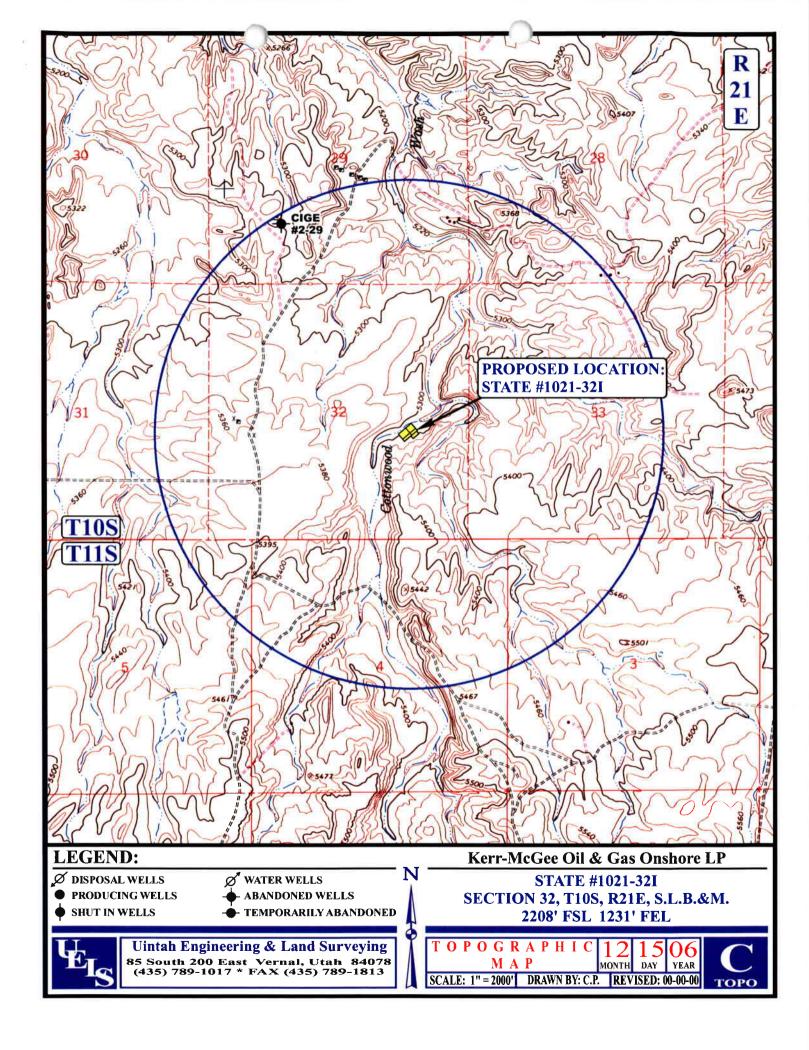
CAMERA ANGLE: SOUTHERLY

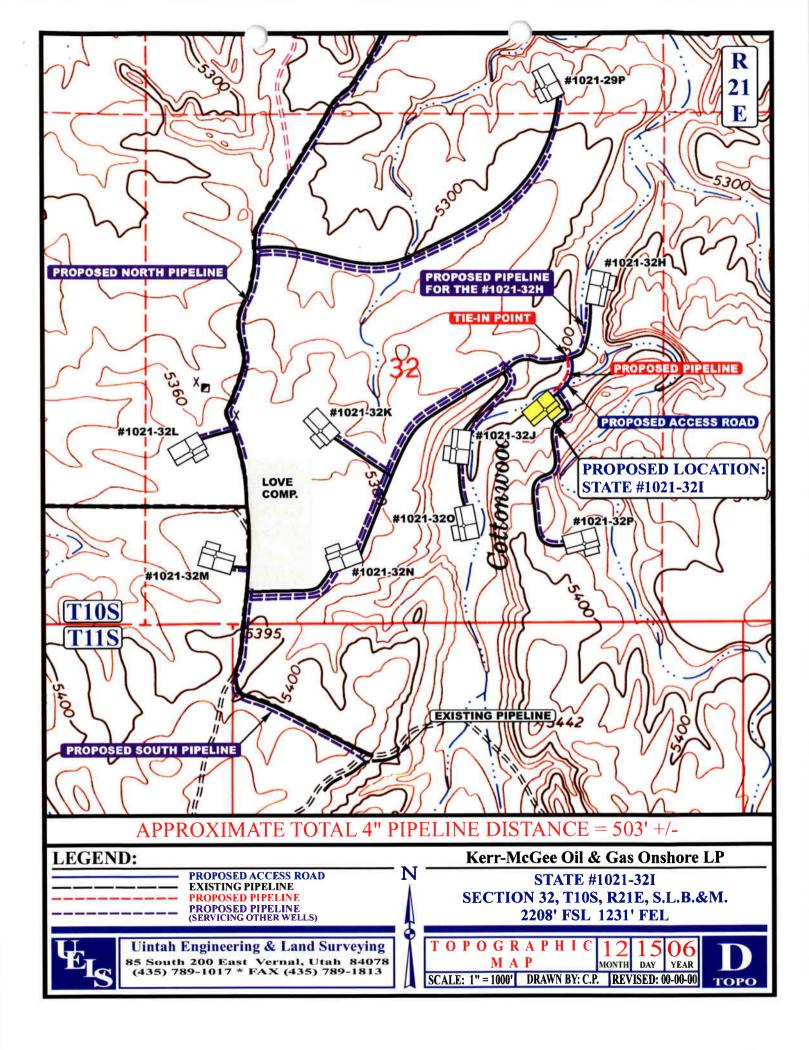












## Kerr-McGee Oil & Gas Onshore LP

STATE #1021-32I PIPELINE ALIGNMENT

LOCATED IN UINTAH COUNTY, UTAH SECTION 32, T10S, R21E, S.L.B.&M.

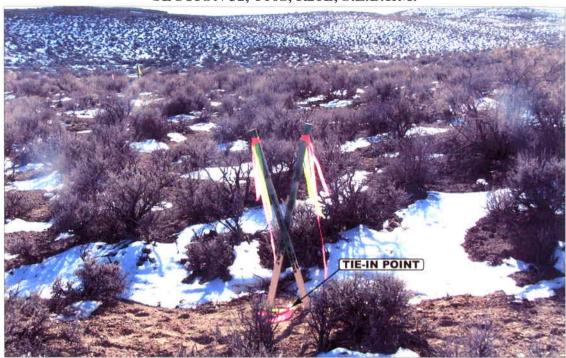


PHOTO: VIEW FROM TIE-IN POINT

**CAMERA ANGLE: SOUTHERLY** 



PHOTO: VIEW OF PIPELINE ALIGNMENT

**CAMERA ANGLE: SOUTHWESTERLY** 



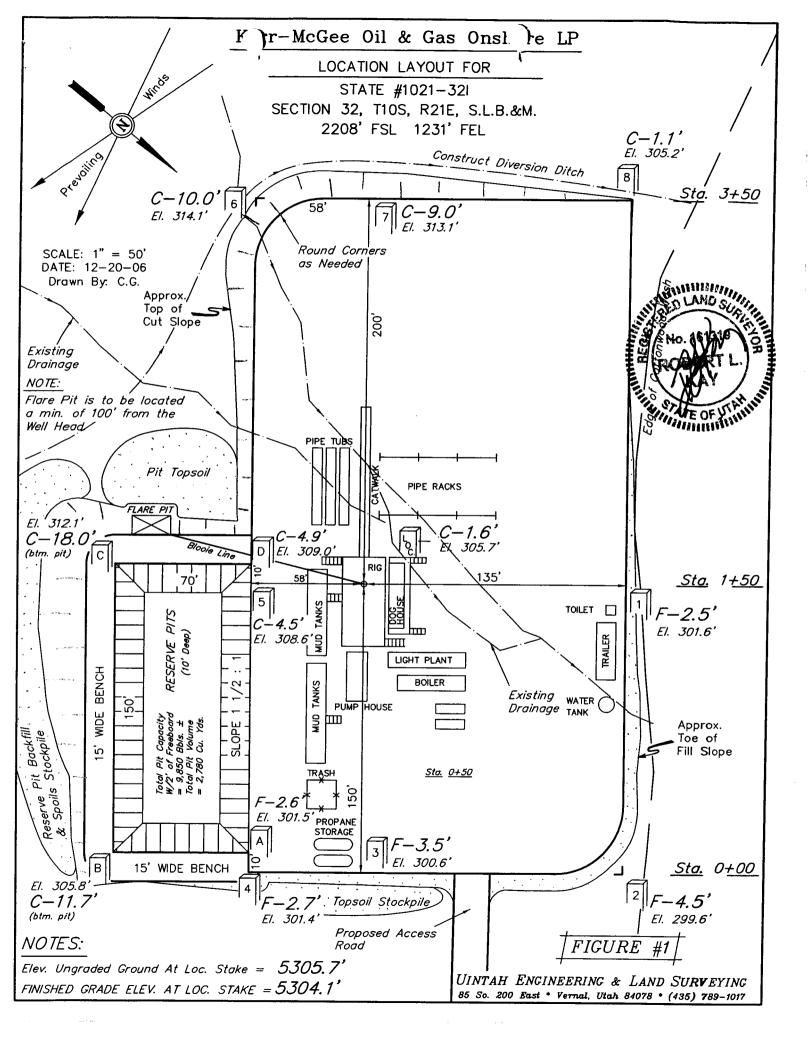
Uintah Engineering & Land Surveying 85 South 200 East Vernal, Utah 84078 435-789-1017 uels@uelsinc.com

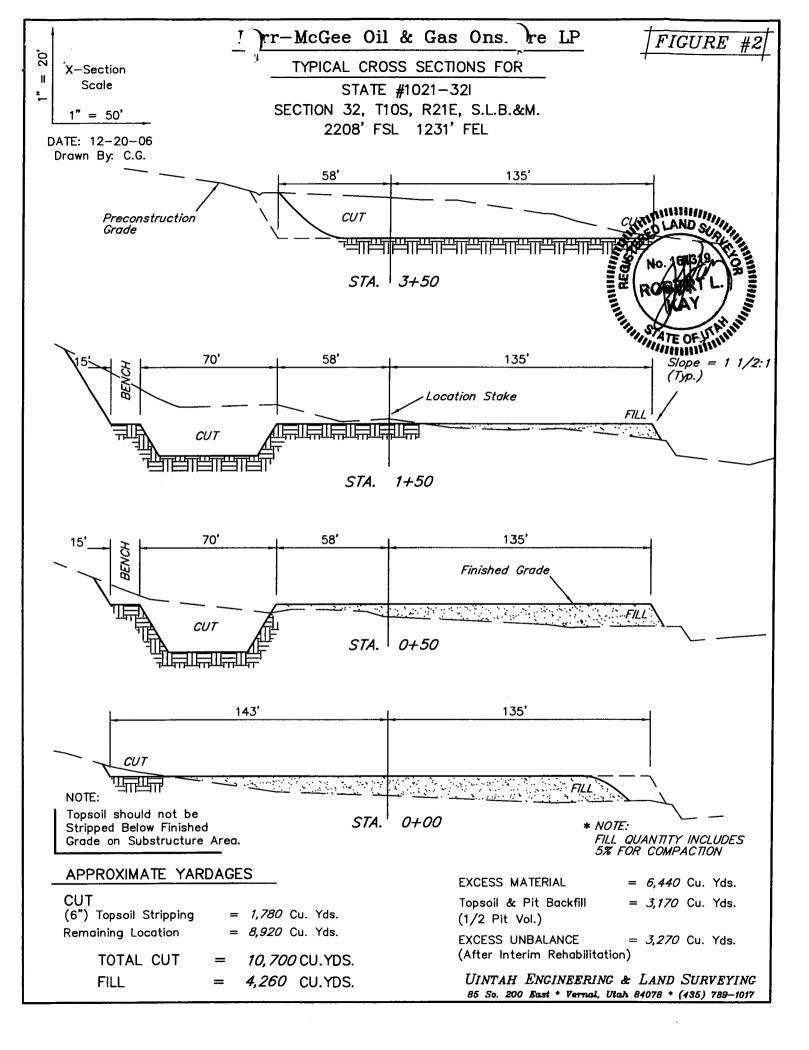
**PIPELINE PHOTOS** 

MONTH DAY YEAR

PHOTO

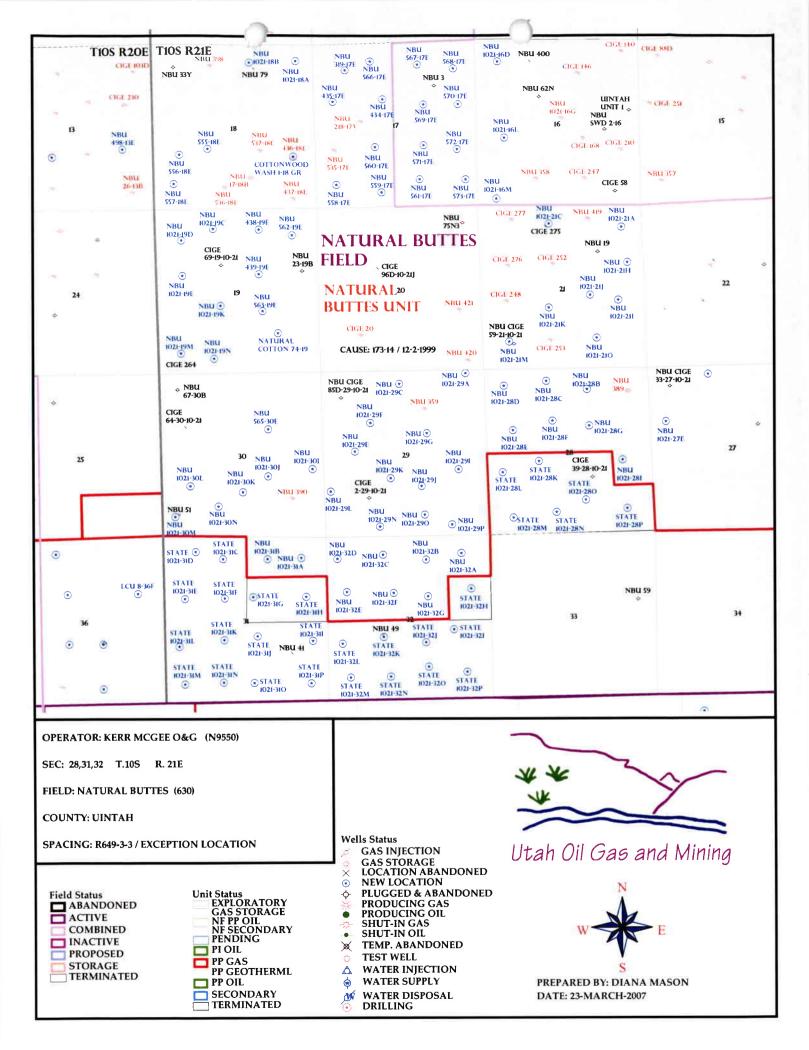
TAKEN BY: L.K. DRAWN BY: C.P. REVISED: 00-00-00





## WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 03/16/2007	API NO. ASSIGNED: 43	-047-39134
WELL NAME: STATE 1021-321		
OPERATOR: KERR-MCGEE OIL & GAS ( N2995 )	PHONE NUMBER: 435-781-	·7024
CONTACT: SHEILA UPCHEGO		
PROPOSED LOCATION:	INSPECT LOCATN BY:	/ /
NESE 32 100S 210E	Tech Review Initia	ls Date
SURFACE: 2208 FSL 1231 FEL BOTTOM: 2208 FSL 1231 FEL	Engineering DC	) 4/24/07
COUNTY: UINTAH	Geology	
LATITUDE: 39.90275 LONGITUDE: -109.5697	Surface	
UTM SURF EASTINGS: 622270 NORTHINGS: 44177	33	
FIELD NAME: NATURAL BUTTES (630  LEASE TYPE: 3 - State  LEASE NUMBER: ML-21577  SURFACE OWNER: 3 - State	PROPOSED FORMATION:  COALBED METHANE WELL?	
RECEIVED AND/OR REVIEWED:	LOCATION AND SITING:	
Plat	R649-2-3.	
Bond: Fed[] Ind[] Sta[] Fee[]	<del></del>	
(No. 22013542 )	Unit:	
Potash (Y/N)	R649-3-2. General	001 8.5 #111-
Oil Shale 190-5 (B) or 190-3 or 190-13	Siting: 460 From Qtr/Qtr & 9	20' Between Wells
Water Permit	R649-3-3. Exception	
(No. 43-8496 )  RDCC Review (Y/N)	Drilling Unit	
(Date: )	Board Cause No:	
LM Fee Surf Agreement (Y/N)	Eff Date: Siting:	
Intent to Commingle (Y/N)	R649-3-11. Directional	Drill
COMMENTS: Need Presite	(04-04-67)	
STIPULATIONS: 1- Space Stratement	C Pasis	
	HALE	
10 01	( ( ( ) )	



# Application for Permit to Drill

### Statement of Basis

4/16/2007

### Utah Division of Oil, Gas and Mining

Page 1

APD No

API WellNo

Status

Well Type

**Surf Ownr** S

**CBM** 

334

43-047-39134-00-00

**Surface Owner-APD** 

GW

No

Operator

KERR-MCGEE OIL & GAS ONSHORE, LP

Unit

Field

Well Name STATE 1021-32I

**UNDESIGNATED** 

Type of Work

Location

NESE 32 10S 21E S

2208 FSL 1231 FEL GPS Coord (UTM) 622270E 4417733N

### **Geologic Statement of Basis**

Kerr McGee proposes to set 1,800' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 4,300'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 32. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. Production casing cement should be brought up above the base of the moderately saline ground water to isolate it from fresher waters uphole.

Brad Hill

APD Evaluator

4/16/2007

Date / Time

### Surface Statement of Basis

The general area is within the Love area of the upper Cottonwood Wash Drainage. The area is characterized by rolling hills and benches, which are frequently intersected by somewhat gentle draws, which flow into Cottonwood Wash. The draws are occasionally rimed with steep side hills, which have exposed sand stone bedrock cliffs along the rims. Cottonwood Wash is an ephemeral drainage, which drains northerly approximately 12 miles to the White River. No seeps, springs or streams exist in the area.

This location is approximately 18 miles southeast of Ouray, Utah and is accessed by the Seep Ridge Road then by existing or planned oil field development roads to within 0.1 miles of the proposed site. New construction will be required from this point.

The proposed location is on the east side of Cottonwood Wash on a slightly elevated gentle sloping bench. The bench contains minor outwashes from side draws. Two small drainages run longitudinally through the location and are planned to be diverted around the pad. The drainage wall to the west contains sandstone bedrock ledges.

Both the surface and minerals are owned by SITLA. Jim Davis represented SITLA at the pre-site investigation. Mr. Davis had no concerns pertaining to this location. The selected location appears to be the best site for drilling and operating a well in the immediate area.

Floyd Bartlett

4/4/2007

**Onsite Evaluator** 

Date / Time

### Conditions of Approval / Application for Permit to Drill

Category

Condition

**Pits** 

A synthetic liner with a minimum thickness of 16 mils with a felt subliner shall be

properly installed and maintained in the reserve pit.

Surface

Drainages adjacent to the proposed pad shall be diverted around the location.

### Utah Division of Oil, Gas and Mining

**Operator** 

KERR-MCGEE OIL & GAS ONSHORE, LP

Well Name

STATE 1021-32I

**API Number** 

43-047-39134-0

**APD No 334** 

Field/Unit UNDESIGNATED

Location: 1/4.1/4 NESE

**Sec** 32 **Tw** 10S

Rng 21E 2208 FSL 1231 FEL

**GPS Coord (UTM)** 622272

4417735

Surface Owner

### **Participants**

Floyd Bartlett (DOGM), Jim Davis (SITLA), Carroll Estes, Tony Keznic, and Clay Einerson (Kerr McGee), David Kay (Uintah Engineering and Land Surveying), and Ben Williams (UDWR)

### Regional/Local Setting & Topography

The general area is within the Love area of the upper Cottonwood Wash Drainage. The area is characterized by rolling hills and benches, which are frequently intersected by somewhat gentle draws, which flow into Cottonwood Wash. The draws are occasionally rimed with steep side hills, which have exposed sand stone bedrock cliffs along the rims. Cottonwood Wash is an ephemeral drainage, which drains northerly approximately 12 miles to the White River. No seeps, springs or streams exist in the area.

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The proposed location is on the east side of Cottonwood Wash on a slightly elevated bench. The bench contains minor outwashes from the side draws. Two small drainages run longitudinally through the location and are planned to be diverted around the pad. The drainage wall to the west contains sandstone bedrock ledges.

Both the surface and minerals are owned by SITLA.

### Surface Use Plan

### **Current Surface Use**

Grazing

Recreational

Wildlfe Habitat

**New Road** 

Miles Well Pad

**Src Const Material** 

**Surface Formation** 

0.1

Width 260

Length 350

Onsite

UNTA

Ancillary Facilities N

### Waste Management Plan Adequate? Y

### **Environmental Parameters**

Affected Floodplains and/or Wetland N

### Flora / Fauna

Vegetation is a shrub type. A moderate stand of big sagebrush exists. Lomatium, greasewood, curly mesquite, spiny hopsage, prickly pear and a few spring annuals are also present.

Antelope, cattle, rabbits, coyotes, and small mammals, birds and raptors.

4/16/2007 Page 1

### Soil Type and Characteristics

Rubbly sandy loam.

Erosion Issues N

Sedimentation Issues N

Site Stability Issues N

### Drainage Diverson Required Y

Around the south and west sides of the location.

Berm Required? N

Erosion Sedimentation Control Required? N

Paleo Survey Run? Y Paleo Potental Observed? N Cultural Survey Run? N Cultural Resources?

### Reserve Pit

Site-Specific Factors		Site I	Ranking		
Distance to Groundwater (feet)	>200		0		
Distance to Surface Water (feet)	>1000		0		
Dist. Nearest Municipal Well (ft)	>5280		0		
Distance to Other Wells (feet)	300 to 1320		10		
Native Soil Type	Mod permeability		10		
Fluid Type	Fresh Water		5		
Drill Cuttings	Normal Rock		0		
Annual Precipitation (inches)	<10		0		
Affected Populations	<10		0		
Presence Nearby Utility Conduits	Not Present		0		
		Final Score	25	1	Sensitivity Level

### Characteristics / Requirements

The proposed reserve pit is 70' x 150' x 10' deep located in a cut on the northwest corner of the location. A 20 mil liner with a felt sub-liner is planned by Kerr McGee.

With the proximity to the bottom of an active drainage, care must be taken to insure the reserve pit is adequately lined and maintained.

Closed Loop Mud Required? N Liner Required? Y Liner Thickness 16 Pit Underlayment Required? Y

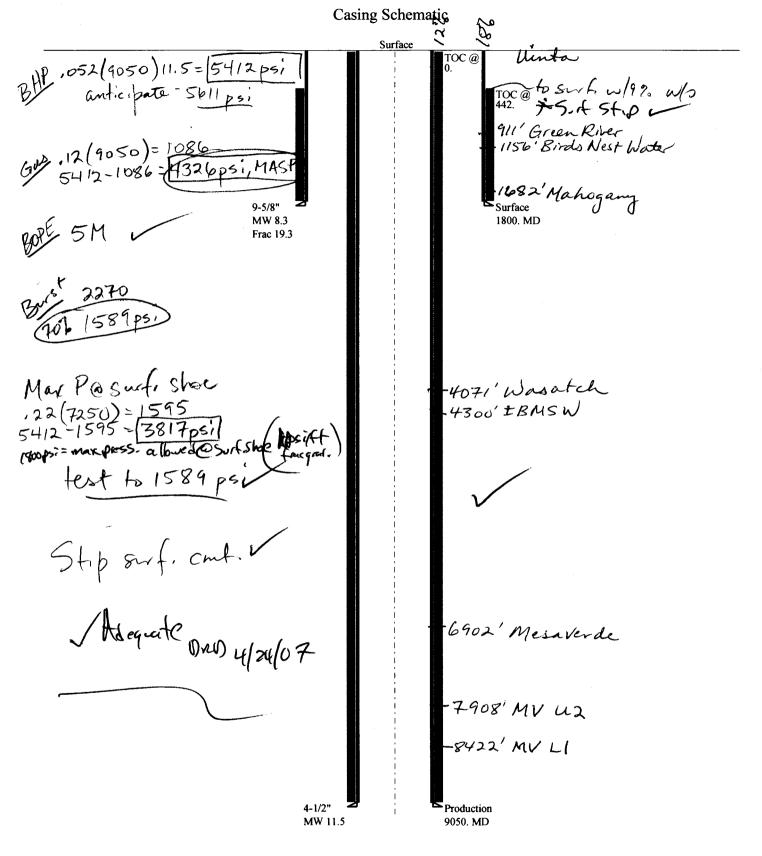
### **Other Observations / Comments**

Ben Williams representing the UDWR stated the area is classified as yearlong critical habitat for antelope. He stated that the lack of water not forage is the limiting factor affecting the herd in the area. He recommended no restrictions for antelope. No other wildlife is expected to be significantly affected. He gave Jim Davis of SITLA and Carroll Estes of Kerr McGee a copy of his wildlife evaluation and a UDWR recommended seed mix to be used when re-vegetating the location.

ATV's were used to access the site.

Floyd Bartlett 4/4/2007
Evaluator Date / Time

### 2007-04 Kerr McGee State 1021-32I



Well name:

2007-04 Kerr McGee State 1021-32I

Operator:

Kerr McGee Oil & Gas Onshore L.P.

String type:

Surface

Project ID:

43-047-39134

Location:

Uintah County, Utah

**Environment:** Minimum design factors:

Collapse

Mud weight:

Design parameters:

8.300 ppg

Design is based on evacuated pipe.

Collapse:

Design factor

1.125

H2S considered?

No Surface temperature: 75 °F 100 °F Bottom hole temperature:

1.40 °F/100ft Temperature gradient:

Minimum section length: 1,400 ft

Burst:

Design factor

1.00

1.80 (J)

1.80 (J)

1.60 (J)

1.50 (J)

1.50 (B)

Cement top:

442 ft

**Burst** 

Max anticipated surface

pressure: Internal gradient: Calculated BHP

1.584 psi 0.120 psi/ft 1,800 psi

No backup mud specified.

Tension:

8 Round STC: 8 Round LTC: **Buttress:** 

Premium: Body yield:

Tension is based on buoyed weight. Neutral point: 1,581 ft

Non-directional string.

Re subsequent strings:

Next setting depth: Next mud weight: Next setting BHP:

9.050 ft 11.500 ppg 5,406 psi

Fracture mud wt: Fracture depth: Injection pressure:

19.250 ppg 1,800 ft 1,800 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	1800	9.625	32.30	H-40	ST&C	1800	1800	8.876	795.3
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	776	1370	1.765	1800	2270	1.26	51	254	4.98 J

Prepared

Helen Sadik-Macdonald Div of Oil, Gas & Minerals

Phone: (801) 538-5357 FAX: (801) 359-3940

Date: April 19,2007 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 1800 ft, a mud weight of 8.3 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:

2007-04 Kerr McGee State 1021-321

Operator:

Kerr McGee Oil & Gas Onshore L.P.

**Production** 

Project ID:

String type:

43-047-39134

Location:

Uintah County, Utah

Minimum design factors:

**Environment:** 

Collapse

Mud weight:

Design parameters:

Collapse: Design factor

H2S considered?

No

11.500 ppg Design is based on evacuated pipe.

1.125

Surface temperature: Bottom hole temperature: 202 °F

75 °F

Temperature gradient:

Non-directional string.

1.40 °F/100ft

Minimum section length: 1,500 ft

Burst:

Design factor

1.00 Cement top: Surface

**Burst** 

Max anticipated surface

No backup mud specified.

pressure:

3,415 psi

Internal gradient: Calculated BHP

0.220 psi/ft 5,406 psi

**Tension:** 

8 Round STC: 1.80 (J) 1.80 (J) 8 Round LTC:

1.60 (J) **Buttress:** 1.50 (J) Premium:

Body yield:

1.50 (B)

Tension is based on buoyed weight. Neutral point: 7.494 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	90̀50	4.5	11.60	I-80	LT&C	9050	9050	3.875	789.8
Run Seq	Collapse Load (psi) 5406	Collapse Strength (psi) 6360	Collapse Design Factor 1.176	Burst Load (psi) 5406	Burst Strength (psi) 7780	Burst Design Factor 1.44	Tension Load (Kips) 87	Tension Strength (Kips) 212	Tension Design Factor 2.44 J

Prepared

Helen Sadik-Macdonald

Div of Oil, Gas & Minerals

Phone: (801) 538-5357

FAX: (801) 359-3940

Date: April 19,2007 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 9050 ft, a mud weight of 11.5 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

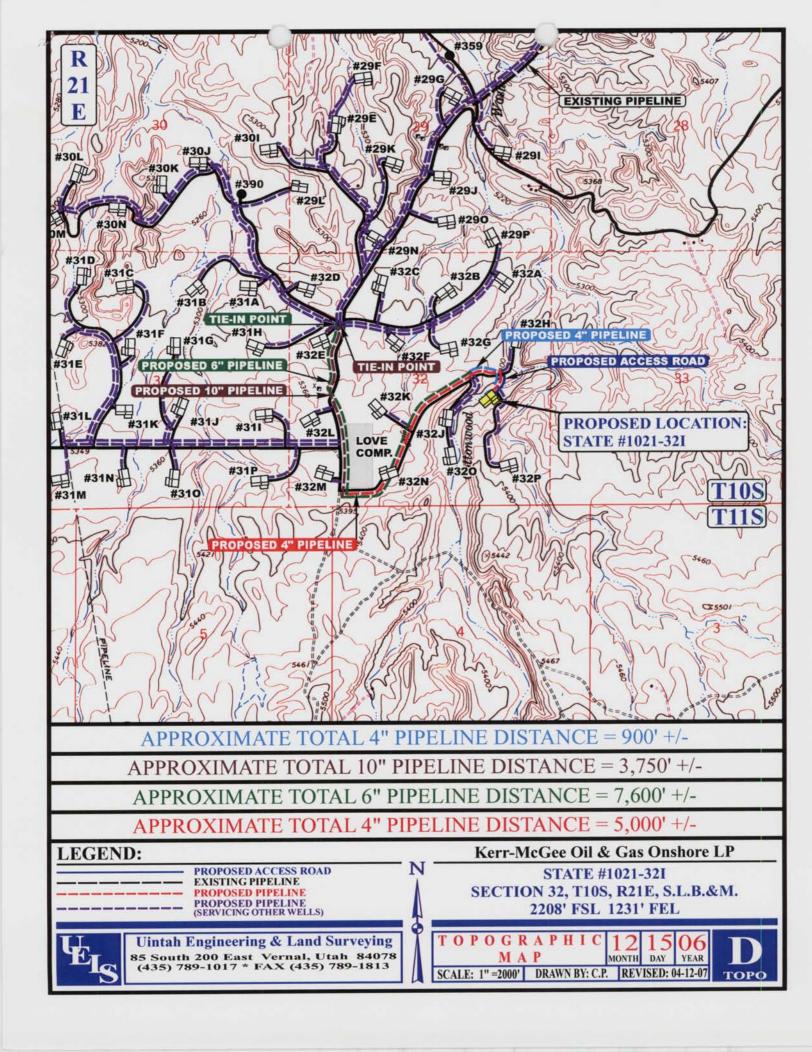
Burst strength is not adjusted for tension.

STATE OF UTAH		FORIW 9	
DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING	5. LEASE DESIGNATION AND SERIAL NUMBER: ML-21577		
SUNDRY NOTICES AND REPORTS ON	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:		
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current botto	7. UNIT or CA AGREEMENT NAME:		
1. TYPE OF WELL  OIL WELL  OR GAS WELL  OTHER	8. WELL NAME and NUMBER: STATE 1021-321		
2. NAME OF OPERATOR:		9. API NUMBER:	
KERR McGEE OIL AND GAS ONSHORE LP		43.047.39134	
3. ADDRESS OF OPERATOR: 1368 SOUTH 1200 EAST VERNAL UT 84076	PHONE NUMBER: (435) 781-7003	10. FIELD AND POOL, OR WILDCAT: NATURAL BUTTES	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2208' FSL 1231' FEL		COUNTY: UINTAH	
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESE 32 10S 21E		STATE: UTAH	
11. CHECK APPROPRIATE BOXES TO INDICATE NA	TURE OF NOTICE, REPOR	RT, OR OTHER DATA	
TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT	DEEPEN	REPERFORATE CURRENT FORMATION	
(Submit in Duplicate)  ALTER CASING	FRACTURE TREAT	SIDETRACK TO REPAIR WELL	
Approximate date work will start: CASING REPAIR	NEW CONSTRUCTION	TEMPORARILY ABANDON	
CHANGE TO PREVIOUS PLANS	OPERATOR CHANGE	TUBING REPAIR	
CHANGE TUBING	PLUG AND ABANDON	VENT OR FLARE	
SUBSEQUENT REPORT CHANGE WELL NAME Submit Original Form Only)	PLUG BACK	WATER DISPOSAL	
Date of work completion:	PRODUCTION (START/RESUME)	WATER SHUT-OFF	
COMMINGLE PRODUCING FORMATIONS	RECLAMATION OF WELL SITE	OTHER:	
	RECOMPLETE - DIFFERENT FORMATION		
An onsite was conducted on 4/4/07 with the Division of Oil, Gas decided to change the proposed pipeline from a 4" pipeline that 5,000' +/- and 900' +/-, a 6" pipeline approximately 7,600' +/-, and Please refer to the attached Topo D.	and Mining Representative was approximately 503' +/- i d a 10" pipeline approximate	and SITLA Representative. It was to, two 4" pipelines approximately ely 3,750'	
		Accepted by the Jtah Division of	
		<b></b>	
		, Gas and Mining r Record Only	
Ramey Hoopes	TITLE Land Specialist I		
NAME (PLEASE PRINT) NOTICE AND OLD AND	4/18/2007		
SIGNATURE 9 WILLIAM WOULD VO	DATE		

(This space for State use only)

RECEIVED

APR 2 3 2007



From:

Ed Bonner

To:

Mason, Diana

Date:

6/22/2007 10:23 AM

Subject:

Well Clearance

### CC:

Davis, Jim; Garrison, LaVonne; Hill, Brad; Hunt, Gil

The following wells have been given cultural resources clearance by the Trust Lands Cultural Resources Group:

### EOG Resources, Inc

Chapita Wells Unit 1330-32 (API 43 047 39293)

Chapita Wells Unit 1326-32 (API 43 047 39294)

Chapita Wells Unit 1327-32 (API 43 047 39295)

Chapita Wells Unit 1325-32 (API 43 047 39296)

Chapita Wells Unit 1331-32 (API 43 047 39300)

Chapita Wells Unit 1328-32 (API 43 047 39301)

### Kerr McGee Oil & Gas Onshore LP

NBU 1021-19M (API 43 047 38150)

NBU 1021-32A (API 43 047 39026)

NBU 1021-32B (API 43 047 39027)

NBU 1021-32C (API 43 047 39028)

NBU 1021-32F (API 43 047 39029)

NBU 1021-32P (API 43 047 39127)

NBU 1021-320 (API 43 047 39128)

NBU 1021-32N (API 43 047 39129)

NBU 1021-32M (API 43 047 39130)

NBU 1021-32L (API 43 047 39131)

NBU 1021-32K (API 43 047 39132)

NBU 1021-32J (API 43 047 39133)

NBU 1021-32I (API 43 047 39134) NBU 1021-32H (API 43 047 39135)

NBU 1021-32G (API 43 047 39136)

NBU 1021-32D (API 43 047 39137) NBU 1021-32E (API 43 047 39138)

Parallel Petroleum Corporation

Trail Creek Anticline 1-2-6-25 (API 43 047 38324)

### QEP Uinta Basin Inc

GB 7SG-36-8-21 (API 43 047 38765)

If you have any guestions regarding this matter please give me a call.



## State Utah DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

**Division of Oil Gas and Mining** 

JOHN R. BAZA
Division Director

June 25, 2007

Kerr-McGee Oil & Gas Onshore, LP 1368 South 1200 East Vernal, UT 84078

Re: State 1021-32I Well, 2208' FSL, 1231' FEL, NE SE, Sec. 32, T. 10 South, R. 21 East,

Uintah County, Utah

### Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-39134.

Sincerely,

Gil Hunt

Associate Director

er

**Enclosures** 

cc: Uintah County Assessor

**SITLA** 



Operator:	Kerr-McGee Oil & Gas Onshore, LP				
Well Name & Number	State 1021-32I				
API Number:	43-047-39134				
Lease:	ML 21577				

Location: NE SE Sec. 32 T. 10 South R. 21 East

### **Conditions of Approval**

### 1. General

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

### 2. Notification Requirements

The operator is required to notify the Division of Oil, Gas and Mining of the following action during drilling of this well:

- 24 hours prior to cementing or testing casing contact Dan Jarvis
- 24 hours prior to testing blowout prevention equipment contact Dan Jarvis
- 24 hours prior to spudding the well contact Carol Daniels
- Within 24 hours of any emergency changes made to the approved drilling program contact Dustin Doucet
- Prior to commencing operations to plug and abandon the well contact Dan Jarvis

The operator is required to get approval from the Division of Oil, Gas and Mining before performing any of the following actions during the drilling of this well:

- Plugging and abandonment or significant plug back of this well contact Dustin Doucet
- Any changes to the approved drilling plan contact Dustin Doucet

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voice mail message if the person is not available to take the call):

• Dan Jarvis at: (801) 538-5338 office (801) 942-0873 home

• Carol Daniels at: (801) 538-5284 office

• Dustin Doucet at: (801) 538-5281 office (801) 733-0983 home

### 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

Page 2 43-047-39134 June 25, 2007

- 4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.
- 5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)
- 6. In accordance with Order in Cause No. 190-5(b) dated October 28, 1982, the Operator shall comply with requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the surface and/or production casing is properly cemented over the entire oil shale interval as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the Division.
- 7. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.
- 8. Surface casing shall be cemented to the surface.

•	STATE OF UTAH				FORM 9	41 <b>0</b> -1
	DEPARTMENT OF NATURAL RESOUR DIVISION OF OIL, GAS AND MIN			5. LEASE DESIGNATION OF THE SECOND SE	GNATION AND SERIAL NUMBER:	d Magner of Mag
SUNDRY	NOTICES AND REPORTS	ON WEL	LS	6. IF INDIAN, AL	LOTTEE OR TRIBE NAME:	
Do not use this form for proposals to drill ne drill horizontal lat	ew wells, significantly deepen existing wells below curre terals. Use APPLICATION FOR PERMIT TO DRILL for	ent bottom-hole dep rm for such proposa	th, reenter plugged wells, or to	7. UNIT or CA A	GREEMENT NAME:	andagen andagen
TYPE OF WELL     OIL WELL     NAME OF OPERATOR:	GAS WELL 🗹 OTHER _			8. WELL NAME STATE 10	021-32I	scarpinas - migras - migras - migras
KERR McGEE OIL & GAS	ONSHORE LP		•	43047391	34	90 pa-
	VERNAL STATE UT ZIP 8	84078	PHONE NUMBER: (435) 781-7024		POOL, OR WILDCAT: LL BUTTES	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2208FS	SL, 1231'FEL			COUNTY: UI	NTAH	
QTR/QTR, SECTION, TOWNSHIP, RANC	GE, MERIDIAN: NESE 32 10S 21	1É		STATE:	UTAH	
11. CHECK APPR	ROPRIATE BOXES TO INDICATE	E NATURE	OF NOTICE, REPO	ORT, OR OT	HER DATA	
TYPE OF SUBMISSION		Т	YPE OF ACTION			_
NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will start:  SUBSEQUENT REPORT (Submit Original Form Only)  Date of work completion:	ACIDIZE  ALTER CASING  CASING REPAIR  CHANGE TO PREVIOUS PLANS  CHANGE TUBING  CHANGE WELL NAME  CHANGE WELL STATUS  COMMINGLE PRODUCING FORMATIONS		TRUCTION CHANGE ABANDON	SIDETR TEMPO TUBING VENT C	FORATE CURRENT FORMATION  CACK TO REPAIR WELL  RARILY ABANDON  B REPAIR  PR FLARE  DISPOSAL  SHUT-OFF	And the second s
	CONVERT WELL TYPE		TE - DIFFERENT FORMATION		·	sentrifices of contributes of contributes of contributions of contribution
THE OPERATOR PROPO A 12 1/4" SURFACE HOLE OF 7 7/8" HOLE TO TD. O THE OPERATOR PLANS	STS AUTHORIZATION FOR A SISES TO DRILL AN 8 3/4" HOLE. E AND SETTING 9 5/8" CSG. THOUR PRODUCTION CSG WILL RICO START THE DRILLING OPERSTORY OF SENT TO OPERATE	AND SET 7 HE OPERAT REMAIN THE RATIONS V FROM DU	" 23# J/K-55 SURF, OR PROPOSES TO E SAME AS WELL A VITH AN AIR RIG IN	ACE CSG. IN O DRILL A 6 AS EVERYTH I ABOUT 10	NSTEAD OF DRILLING .125" HOLE INSTEAD HING ELSE.	system  dyne  dyne
	Date: 6:10:200	<u> </u>				edigentes dispersion dispersion dispersion dispersion dispersion
NAME (PLEASE PRINT) SHEILA UI	PCHEGO	тпта	E SENIOR LAND	ADMIN SPE	CIALIST	angrigate angrigate grandens
SIGNATURE ///	MADMU	DAT	<sub>E</sub> 5/22/2008			green filmen green filmen aren filmen green filmen green filmen
(This space for State use only) APPF	OVED BY THE STATE UTAH DIVISION OF	-				de form 1 out

(5/2000)

OIL, GAS, AND MINIT ons on Reverse Side) + Verbil given 5/22/08

**RECEIVED** 

MAY 27 2008

DIVINE OIL CAR STAINING

2007-04 Kerr McGee State 1021-32 rev6-08 Well name:

Kerr McGee Oil & Gas Onshore L.P. Operator:

Surface String type: Project ID: 43-047-39134

Location: Uintah County, Utah

**Design parameters:** Minimum design factors: **Environment:** Collapse

Collapse: H2S considered? No 75 °F Mud weight: 8.300 ppg Design factor 1.125 Surface temperature:

100 °F Design is based on evacuated pipe. Bottom hole temperature: Temperature gradient: 1.40 °F/100ft

Minimum section length: 1,400 ft

**Burst:** 

Design factor 1.00 Cement top: Surface **Burst** 

Max anticipated surface

pressure: 1,584 psi Internal gradient: 0.120 psi/ft Non-directional string. Tension:

Calculated BHP 8 Round STC: 1,800 psi 1.80 (J) 8 Round LTC: 1.80 (J)

No backup mud specified. **Buttress:** 1.60 (J) 1.50 (J) Premium:

Body yield: 1.50 (B) Re subsequent strings: Next setting depth:

1800

Tension is based on buoyed weight.

Next mud weight: 11.500 ppg Neutral point: 1,575 ft Next setting BHP: 5,406 psi Fracture mud wt: 19.250 ppg

9,050 ft

7.84 J

Fracture depth: 1,800 ft 1,800 psi Injection pressure:

36

284

Run Segment Nominal End True Vert Measured Drift Internal Seq Length Size Weight Grade **Finish** Depth Depth Diameter Capacity (lbs/ft) (ft³) (ft) (in) (ft) (ft) (in) 1800 23.00 J-55 ST&C 1800 1800 6.25 397.9 1 Collapse Run Collapse Collapse Burst Burst Burst Tension Tension **Tension** Seq Load Strength Design Load Strength Design Load Strength Design (psi) **Factor** (psi) (psi) **Factor** (Kips) (Kips) **Factor** (psi)

4360

2.42

Helen Sadik-Macdonald Phone: (801) 538-5357 Date: June 2,2008 Prepared Div of Oil, Gas & Minerals FAX: (801) 359-3940 Salt Lake City, Utah

Collapse is based on a vertical depth of 1800 ft, a mud weight of 8.3 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

776

1

3270

4.213

## DIVISION OF OIL, GAS AND MINING

## **SPUDDING INFORMATION**

Name of Cor	npany: K	ERR-McGEE (	OIL & G	AS ONSE	<u>IORE, I</u>	LP	
Well Name:		STATE 1021-	-32I		_		
Api No <u>:</u>	43-047-391	34	Lea	se Type:	STA	TE	
Section 32	Township_	10S Range	21E	County	UIN	ГАН	
Drilling Con	itractor	PETE MAR	ΓΙΝ DRI	LG	_RIG #_	BUCKET	
SPUDDE	D:						
	Date	06/06/08	_				
	Time	10:30 AM	<del></del>				
	How	DRY	_				
Drilling wi	II Commend	e:				····	
Reported by		LEW W	ELDON				
Telephone #_		(435) 828	-7035				
Date	06/06//08	Signed_	СНІ	)			

DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

#### **ENTITY ACTION FORM**

zip 84078

Operator:

KERR McGEE OIL & GAS ONSHORE LP

Operator Account Number: N 2995

Address:

1368 SOUTH 1200 EAST

city VERNAL

state UT

Phone Number: \_(435) 781-7024

Well 1

API Number	Well	Name	QQ Sec Twp Rng C				County
4304737318	BONANZA 1023-5B		NWNE	5	108	23E	UINTAH
Action Code	Current Entity Number	New Entity Number	s	pud Da	te		ity Assignment ffective Date
A	99999	16904		6/6/2008	3	61	119 108

MIRU PETE MARTIN BUCKET RIG. (US) //// U SPUD WELL LOCATION ON 06/06/2008 AT 1000 HRS.

Well 2

API Number	Well	Name	QQ	Sec	Twp	Rng	County
4304739828	NBU 922-18M2S		NWSW	18	98	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	s	pud Dat	te	1	ity Assignment iffective Date
B	99999	3900		6/6/2008	3	6	119 108

Comments:

WEMVD MIRU PETE MARTIN BUCKET RIG. SPUD WELL LOCATION ON 06/06/2008 AT 0800 HRS.

SPUD WELL LOCATION ON 06/06/2008 AT 1030 HRS.

BHL = SWSI

Well 3

API Number	Well	Well Name QQ S				Rng	County
4304739134	STATE 1021-32I		NESE	32	108	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	y Spud Date Entity A		ity Assignment ffective Date		
A	99999	16905		6/6/200	8	6/	19/08
Comments: MIRI	U PETE MARTIN BUCK	KET RIG. WS7	NVD			<del></del>	

**ACTION CODES:** 

A - Establish new entity for new well (single well only)

B - Add new well to existing entity (group or unit well)

C - Re-assign well from one existing entity to another existing entity

D - Re-assign well from one existing entity to a new entity

E - Other (Explain in 'comments' section)

SHEILA UPCHEGO

Name (Please Print)

Signature SENIOR LAND SPECIALIST

6/6/2008

Title

Date

(5/2000)

JUN 1 0 2008

RECEIVED

	DEPARTMENT OF NATURAL RESOUR			
	DIVISION OF OIL, GAS AND MII	NING		5. LEASE DESIGNATION AND SERIAL NUMBER: ML-21577
SUNDRY	NOTICES AND REPORTS	S ON WEL	LS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to drill no	ew wells, significantly deepen existing wells below curn terals. Use APPLICATION FOR PERMIT TO DRILL fo	rent bottom-hole dept	th, reenter plugged wells, or to	7. UNIT or CA AGREEMENT NAME: UNIT #891008900A
1. TYPE OF WELL OIL WELL	GAS WELL 🗸 OTHER_			8. WELL NAME and NUMBER: STATE 1021-321
2. NAME OF OPERATOR:		· · · · · · · · · · · · · · · · · · ·		9. API NUMBER:
KERR McGEE OIL & GAS	ONSHORE LP		Dugue willing	4304739134
3. ADDRESS OF OPERATOR: 1368 SOUTH 1200 EAST	VERNAL STATE UT ZIP	84078	PHONE NUMBER: (435) 781-7024	10. FIELD AND POOL, OR WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2208'F	SI 1231'FFI			COUNTY: UINTAH
TOOTAGES AT GOTTAGE. ZZOOT	01, 12011 12			SSSN11. SHTT/HT
QTR/QTR, SECTION, TOWNSHIP, RAN	ge, meridian: NESË 32 10S 2	?1É		STATE: <b>UTAH</b>
11. CHECK APPF	ROPRIATE BOXES TO INDICAT	E NATURE	OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION		T	YPE OF ACTION	
NOTICE OF INTENT	ACIDIZE	DEEPEN		REPERFORATE CURRENT FORMATION
(Submit in Duplicate)	ALTER CASING	FRACTURE	TREAT	SIDETRACK TO REPAIR WELL
Approximate date work will start:	CASING REPAIR	NEW CONS	TRUCTION	TEMPORARILY ABANDON
	CHANGE TO PREVIOUS PLANS	OPERATOR	CHANGE	TUBING REPAIR
	CHANGE TUBING	PLUG AND	ABANDON	VENT OR FLARE
SUBSEQUENT REPORT	CHANGE WELL NAME	PLUG BACK	<	WATER DISPOSAL
(Submit Original Form Only)	CHANGE WELL STATUS	PRODUCTIO	ON (START/RESUME)	WATER SHUT-OFF
Date of work completion:	COMMINGLE PRODUCING FORMATIONS	RECLAMATI	ION OF WELL SITE	✓ OTHER: WELL SPUD
	CONVERT WELL TYPE	RECOMPLE	TE - DIFFERENT FORMATION	
12. DESCRIBE PROPOSED OR CO	DMPLETED OPERATIONS. Clearly show all p	pertinent details inc	cluding dates, depths, volume	es, etc.
MIRU PETE MARTIN BUG W/28 SX READY MIX.	CKET RIG. DRILLED 20" COND	OUCTOR HOL	_E TO 40'. RAN 14"	36.7# SCHEDULE 10 PIPE. CMT
COLID WELL LOCATION	ON 06/06/2008 AT 1030 HRS.			
SPUD WELL LOCATION	ON 00/00/2008 AT 1030 TIKS.			
SHEIL A LI	JPCHEGO	_	_ SENIOR LAND A	ADMIN SPECIALIST
NAME (PLEASE PRINT) SHELLA	( ) willelin	+ TITL		
SIGNATURE ///////	CHANNET O	DAT	6/6/2008	

(This space for State use only)

RECEIVED
JUN 17 2008

DEPARTMENT OF NATURAL RESOURCES	
DIVISION OF OIL, GAS AND MINING	5. LEASE DESIGNATION AND SERIAL NUMBER: ML-21577
SUNDRY NOTICES AND REPORTS ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	7. UNIT or CA AGREEMENT NAME: UNIT #891008900A
1. TYPE OF WELL OIL WELL GAS WELL OTHER	8. WELL NAME and NUMBER: STATE 1021-321
2. NAME OF OPERATOR:	9. API NUMBER:
KERR McGEE OIL & GAS ONSHORE LP  3. ADDRESS OF OPERATOR: PHONE NUMBER:	4304739134 10. FIELD AND POOL, OR WILDCAT:
1368 SOUTH 1200 EAST CITY VERNAL STATE UT ZIP 84078 (435) 781-7024	NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2208'FSL, 1231'FEL	COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESE 32 10S 21E	STATE: UTAH
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPO	
	ICT, OR OTHER DATA
TYPE OF SUBMISSION TYPE OF ACTION  ACIDIZE DEEPEN	REPERSONATE CURPENT FORMATION
NOTICE OF INTENT	REPERFORATE CURRENT FORMATION
(Submit in Duplicate)	SIDETRACK TO REPAIR WELL
Approximate date work will start:	TEMPORARILY ABANDON
CHANGE TO PREVIOUS PLANS OPERATOR CHANGE	TUBING REPAIR
CHANGE TUBING PLUG AND ABANDON	VENT OR FLARE
SUBSEQUENT REPORT CHANGE WELL NAME PLUG BACK (Submit Original Form Only)	WATER DISPOSAL
Date of work completion:  CHANGE WELL STATUS  PRODUCTION (START/RESUME)	WATER SHUT-OFF
COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SITE	✓ OTHER: SET SURFACE CSG
CONVERT WELL TYPE RECOMPLETE - DIFFERENT FORMATION	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volume	es, etc.
MIRU PROPETRO AIR RIG ON 06/08/2008. DRILLED 8 3/4" SURFACE HOLE TO 1950'. LEAD CMT W/80 SX HIFILL CLASS G @11.0 PPG 3.82 YIELD. TAILED CMT W/100 SX PIYIELD. GOOD RETURNS THROUGH OUT JOB 11 +/- BBLS LEAD CMT TO PIT. RAN 50' CLASS G @15.8 PPG 1.15 YIELD. DOWN 1" PIPE GOOD CMT TO SURFACE HOLE STA	REM CLASS G @15.8 PPG 1.15 OF 1" PIPE. CMT W/80 SX PREM
WORT	RECEIVED
	JUN 17 2008
	DIV. OF OIL, GAS & MINING
NAME (PLEASE PRINT) SHEILA UPCHEGO	ADMIN SPECIALIST
SIGNATURE MUNICIPAL DATE 6/12/2008	

(This space for State use only)

DEPARTMENT OF NATURAL RESOURCES	
DIVISION OF OIL, GAS AND MINING	5. LEASE DESIGNATION AND SERIAL NUMBER: ML-21577
SUNDRY NOTICES AND REPORTS ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	7. UNIT or CA AGREEMENT NAME: UNIT #891008900A
1. TYPE OF WELL OIL WELL GAS WELL OTHER	8. WELL NAME and NUMBER: STATE 1021-32I
2. NAME OF OPERATOR: KERR McGEE OIL & GAS ONSHORE LP	9. API NUMBER: 4304739134
3. ADDRESS OF OPERATOR: 1368 SOUTH 1200 EAST CITY VERNAL STATE UT ZIP 84078 PHONE NUMBER: (435) 781-7024	10. FIELD AND POOL, OR WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2208'FSL, 1231'FEL	COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESE 32 10S 21E	STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION TYPE OF ACTION	
NOTICE OF INTENT (Submit in Duplicate)  ACIDIZE DEEPEN ALTER CASING FRACTURE TREAT	REPERFORATE CURRENT FORMATION SIDETRACK TO REPAIR WELL
Approximate date work will start:  CASING REPAIR  NEW CONSTRUCTION  CHANGE TO PREVIOUS PLANS  OPERATOR CHANGE	TEMPORARILY ABANDON TUBING REPAIR
CHANGE TUBING PLUG AND ABANDON	VENT OR FLARE
(Submit Original Form Only)	WATER DISPOSAL
Date of work completion:  CHANGE WELL STATUS  PRODUCTION (START/RESUME)	WATER SHUT-OFF
COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SITE  CONVERT WELL TYPE RECOMPLETE - DIFFERENT FORMATION	OPERATIONS
PINISHED DRILLING FROM 1950' TO 9210' ON 07/18/2008. RAN 4 1/2" 11.6# I-80 PROESX PREM LITE II @11.0 PPG 3.38 YIELD. TAILED CMT W/600 SX 50/50 POZ @14.3 PPBBLS CLAYFIX FINAL CIRC PSI OF 3200 GOOD RETURNS FLOATS HELD. NO CMT BAHANGER NDBOP CLEAN PITS.  RELEASED PIONEER RIG 38 ON 07/20/2008 AT 0600 HRS.	OUCTION CSG. LEAD CMT W/130 G 1.31 YIELD. DISPLACE W/142
NAME (PLEASE PRINT) SHEILA UPCHEGO TITLE REGULATORY	ANALYST
SIGNATURE MILE MILE MILE 7/21/2008	

(This space for State use only)

	DIVISION OF OIL, GAS AND MIN		5. LEASE DESIGNATION AND SERIAL NUMBER: ML-21577
SUNDRY	NOTICES AND REPORTS	S ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
drill horizontal la	new wells, significantly deepen existing wells below curr aterals. Use APPLICATION FOR PERMIT TO DRILL fo	rent bottom-hole depth, reenter plugged wells, or to orm for such proposals.	7. UNIT OF CA AGREEMENT NAME: NO LINIT #881998900A UNIT
1. TYPE OF WELL OIL WELL	GAS WELL 🗸 OTHER _		8. WELL NAME and NUMBER: STATE 1021-321
2. NAME OF OPERATOR: KERR McGEE OIL & GAS	S ONSHORE LP		9. API NUMBER: 4304739134
3. ADDRESS OF OPERATOR:		PHONE NUMBER:	10. FIELD AND POOL, OR WILDCAT:
1368 SOUTH 1200 EAST  4. LOCATION OF WELL	Y VERNAL STATE UT ZIP	84078 (435) 781-7024	NATURAL BUTTES
FOOTAGES AT SURFACE: 2208'F	FSL, 1231'FEL		COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSHIP, RAN	NGE, MERIDIAN: NESE 32 10S 2	1E	STATE: UTAH
11. CHECK APPI	ROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
NOTICE OF INTENT	ACIDIZE	DEEPEN	REPERFORATE CURRENT FORMATION
(Submit in Duplicate)	ALTER CASING	FRACTURE TREAT	SIDETRACK TO REPAIR WELL
Approximate date work will start:	CASING REPAIR	NEW CONSTRUCTION	TEMPORARILY ABANDON
	CHANGE TO PREVIOUS PLANS	OPERATOR CHANGE	TUBING REPAIR
	CHANGE TUBING	PLUG AND ABANDON	VENT OR FLARE
SUBSEQUENT REPORT (Submit Original Form Only)	CHANGE WELL NAME	PLUG BACK	WATER DISPOSAL
Date of work completion:	CHANGE WELL STATUS	PRODUCTION (START/RESUME)	WATER SHUT-OFF
	COMMINGLE PRODUCING FORMATIONS	RECLAMATION OF WELL SITE  RECOMPLETE - DIFFERENT FORMATION	OTHER: PRODUCTION START-UP
	CONVERT WELL TYPE		
12. DESCRIBE PROPOSED OR CO	OMPLETED OPERATIONS. Clearly show all p	pertinent details including dates, depths, volume	es, etc.
	,		
THE SUBJECT WELL LO	OCATION WAS PLACED ON PRO	DDUCTION ON 08/15/2008 AT 10	D:30 AM.
PLEASE REFER TO THE	E ATTACHED CHRONOLOGICAL	L WELL HISTORY.	
	•		
. · ·			
CHEII V I	JPCHEGO	REGULATORY A	ANALYST
NAME (PLEASE PRINT)	101120	THEE	
CIONATURE // ///	M. MIMINIMO	DATE 8/18/2008	

(This space for State use only)

**RECEIVED** AUG 2 0 2008

**STATE 1021-321** Wins No.: 94198 **Well Operations Summary Long** SPUD DATE KB ROUTE FIELD NAME Operator 5322 06/06/2008 5,306 KERR MCGEE OIL & GAS ONSHORE LP NATURAL BUTTES DIVISION COUNTY STATE API ROCKIES UINTAH HATU 4304739134 2,208.00' FSL 1,231.00' FEL Footages: NESE / 32 / 10S / 21E Long/Lat.: 39.90271 / -109.57036 Q-Q/Sect/Town/Range: Wellbore: STATE 1021-321 PRTVD TVD 5.322 5,322 9,202 9,210 AFE NO.: 2007881 START DATE: 6/6/2008 EVENT ACTIVITY: DRILLING EVENT INFORMATION: END DATE: 7/20/2008 OBJECTIVE: DEVELOPMENT DATE WELL STARTED PROD.: OBJECTIVE 2: VERTICAL WELL Event End Status: COMPLETE REASON: Rig Release Rig Off Location Begin Mobilization Finish Drilling Rig On Location Rig Operation Start Rig Charges RIG OPERATIONS: 07/21/2008 07/18/2008 07/20/2008 07/03/2008 07/03/2008 07/05/2008 PIONEER 38 / 38 07/03/2008 Operation P/U Code Subco Time Duration Phase Date Start-End (hr) MD: 56 SUPERVISOR: LEW WELDON 6/6/2008 MOVE IN AND RIG UP BUCKET RIG SPUD WELL @ 1030 HR DRLCON 02 10:30 - 18:00 7.50 6/6/08 DRILL AND SET 40' OF SCHEDULE 10 PIPE DRILL RODENT HOLES FOR RIG 38 BLM AND STATE NOTFIED OF SPUD 1,320 SUPERVISOR: LEW WELDON 6/8/2008 MOVE IN AND RIG UP AIR RIG SPUD WELL @ 0730 HR 6/8/08 DA DRLSUR 02 7:30 - 12:00 4.50 AT REPORT TIME 630' RIG DRILLING AHEAD NO WATER 1320' DRUSUR 12:00 - 0:00 12.00 MD: 1,950 SUPERVISOR: LEW WELDON 6/9/2008 RIG DRILLING AHEAD NO WATER 1770' DRLSUR 02 0:00 - 12:00 12.00 RIG T/D @ 1950' CONDITION HOLE 1 HR 12:00 - 16:00 4.00 DRLSUR 02 TRIP DP OUT OF HOLE DRLSUR 05 16:00 - 19:00 3.00 RUN 1918' OF 7" CSG AND 50' OF 1" PIPE RIG DOWN AIR RIG DRLSUR 11 19:00 - 22:00 3.00 CEMENT 1ST STAGE WITH 80 SKS LEAD @ 11# 3.82 23 GAL/SK DRLSUR 22:00 - 22:30 0.50AND 100 SKS TAIL @ 15.8# 1.15 5.0 GAL SK GOOD RETURNS THRUOUT JOB + - 11 BBL LEAD CMT TO PIT 1ST TOP JOB 80 SKS DOWN 1" PIPE GOOD CMT TO SURFACE 22:30 - 23:30 1.00 DRLSUR 15 AND STAYED AT SURFACE NO VISIBLE LEAKS PIT 1/4 FULL WORT DRLSUR 23:30 - 23:30 0.00

Vins No.:	94198				STAT	E 1021	-32l API No.:	management Committee Color	04739134
/2/2008	<u>SUPERVISOR:</u> 18:00 - 0:00			01	E	Р	PREP F/MOVE TO STATE 1021-32i	<u>MD:</u>	1,950
/3/2008	<u>SUPERVISOR:</u> 0:00 - 7:00	KENNY MORR 7.00	IS RDMO	01	E	P	RDRT PREP F/MOVE	MD:	1,950
	7:00 - 18:00	11.00	MIRU	01	Α	Р	MOVE & RURT		
	18:00 - 0:00	6.00	MIRU	01	В	Р	RURT		
/4/2008	SUPERVISOR:						DUDT	MD:	1,950
	0:00 - 10:00	10.00	MIRU	01	В	Р	RURT		
	10:00 - 11:00	1.00	MIRU	06	D	Р	CUT & SLIP		
	11:00 - 17:00	6.00	PRPSPD	13	С	Р	TEST RAMS,CHOKE & MANIFOLD 5K,ANNULAR2500,0	SG 150	0
	17:00 - 22:00	5.00	PRPSPD	05	Α	Р	P/U BHA		
	22:00 - 0:00	2.00	PRPSPD	02	F	Р	DRILL CEMENT 1800 TO 1905		
7/5/2008	<u>SUPERVISOR:</u> 0:00 - 3:00	KENNY MOR 3.00	RIS PRPSPD	02	F	P	DRILL CEMENT & FE TO 1950	MD:	2,650
	3:00 - 6:00	3.00	DRLPRO	02	Α	P	DRILL NEW 6.25 FROM 1950 TO 2005,		
	6:00 - 7:00	1.00	DRLPRO	07	Α	P	WORK ON SURVEY MACHINE		
	7:00 - 7:30	0.50	DRLPRO	09	A	Р	SURVEY @1965=1.5		
	7:30 - 12:00	4.50	DRLPRO	05	Α	Р	POOH ,P/U DROP BIT & MUD MTR,TIH		
	12:00 - 15:00	3.00	DRLPRO .	02	В	Р	DRILL F/2005 TO 2176,AVG 57 WT 8.5/28		
	15:00 - 15:30	0.50	DRLPRO	09	Α	Р	SURVEY@2105=2		
	15:30 ~ 16:3	0 1.00	DRLPRO	02	В	Р	DRILL F/2176 TO 2271,AVG 95 WT 8.9/32		
	16:30 - 17:0	0 0.50	DRLPRO	06	Α	Р	RIG SERVICE		

Vins No.:	94198	to make a series of the series		F	STAT	E 1021	-321 API No.:	4304	739134
11113 11011	16:30 - 17:00		DRLPRO	06	Α	Р	RIG SERVICE		
	17:00 - 0:00		DRLPRO	02	В	Р	DRILL F/2271 TO 2650,AVG 54		
, v		×	* * · · · · · · · · · · · · · · ·					ИD: 3	,780
/6/2008		KENNY MORI		00	٨	Р	SURVEY@2580=2		,
	0:00 - 0:30	0.50	DRLPRO	09	Α	Г	30KVLT@2330 2		
	•								
	0:30 - 12:0	11.50	DRLPRO	02	В	Р	DRILL F/2650 TO 3320,AVG 58 WT 9.1/34		
						_	DIO CEDIVICE		
	12:00 - 12:3	0.50	DRLPRO	06	Α	Р	RIG SERVICE		
	12:30 - 13:0	0 0.50	DRLPRO	09	Α	Р	SURVEY@3250=2		
	13:00 - 0:00	11.00	DRLPRO	02	В	Р	DRILL F/3320' TO 3780,AVG 42		
	CUDEDVICOR	: KENNY MOR	DDIQ	//4	· · · · · · · · · · · · · · · · · · ·		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	MD:	4,650
7/7/2008	0:00 - 13:0		DRLPRO	02	В	Р	DRILL F/3780 TO 4332,AVG 42 WT 9.5/41		
	0.00	10.00	2,,2,,,,						
	13:00 - 13:3	0.50	DRLPRO	06	Α	Р	RIG SERVICE		
	13:30 - 14:0	0.50	DRLPRO	09	Α	Р	SURVEY@4260=2.5		
	13.30 - 14:0	0.50	DKLI KO	00		•			
	14:00 - 15:	30 1.50	DRLPRO	07	Α	Р	WORK ON PASON DRLG RECORDER, MAIN DATA BOX D	EAD	
	4E:20 0:0		DRLPRO	02	В	Р	DRILL F/4332 TO 4650 ,		
	15:30 - 0:0	0 8.50	DKLI NO	02		•			
7/8/2008	SUPERVISO	R: KENNY MO	RRIS					MD:	5,445
	0:00 - 17:		DRLPRO	02	В	Р	DRILL F/4650 TO 5223,AVG 34 WT 9.8/44		
	47.00			06	Α	Р	RIG SERVICE		
	17:00 - 17:	30 0.50	DRLPRO	00	,,				
	17:30 - 18:	00 0.50	DRLPRO	09	Α	Р	SURVEY@5153=2.5		
	40.00		DDI DDC	02	В	Р	DRILL F/5223 TO 5445,,AVG37 WT 9.9/42		•
	18:00 - 0:	00 6.00	DRLPRO	UZ	U				
7/9/2008	SUPERVISO	R: KENNY MC	RRIS		. 3310			MD:	6,078
,,5,2550	0:00 - 14		DRLPRO	02	В	Р	DRILL F/5445 TO 5856, AVG 29 WT 9.9/42		
						_	DIC CEDVICE		
	14:00 - 14	:30 0.50	DRLPRO	06	Α	Р	RIG SERVICE		

Vins No.:		a man annual and the same have a second				<u>1-321</u> API N	10 43	04739134
	14:30 - 0:00	9.50 DRLPR	O 02	В	Р	DRILL F/5856 TO 6078,AVG 23 WT 10/42		
							MD:	6 350
/10/2008	SUPERVISOR: H			-		DDH L E/2078 TO 6125 AVG 19 A/T 10/A2	<u> </u>	0,000
	0:00 - 3:00	3.00 DRLPR	O 02	В	Р	DRILL F/6078 TO 6135,AVG 19 WT 10/42		,
	3:00 - 7:00	4.00 DRLPR	O 05	Α	Р	DROP SURVEY,POOH,CHANGE BIT & MTR		
	0.00	4.00	5		·	, ,		
	7:00 - 10:30	3.50 DRLPR	O 05	Α	Р	TIH ,CIRC BHA,TIH TO 4750 '		
	10:30 - 12:00	1.50 DRLPR	O 03	Α	S	WASH & REAM 4750 TO 5200		
	10.00					TIH TO 5900		
	12:00 - 12:30	0.50 DRLPR	O 05	Α	Р	11A 1O 3900		
	12:30 - 13:30	1.00 DRLPR	O 03	Α	Р	WASH & REAM 220 ' TO BOTTOM		
	13:30 - 0:00	10.50 DRLPR	02	В	Р	DRILL F/6135 TO 6350,AVG 20 WT 10.5/44		
			<u> </u>					
7/11/2008	SUPERVISOR:	KENNY MORRIS					MD:	6,790
	0:00 - 12:30	12.50 DRLPF	RO 02	В	Р	DRILL F/6350 TO 6585,AVG 18,WT 10.5/43		
	10:00				Р	RIG SERVICE		
	12:30 - 13:00	0.50 DRLPF	RO 06	Α	Г	NG SERVICE		
	13:00 - 0:00	11.00 DRLPF	RO 02	В	Р	DRILL F/6585 TO 6795,AVG 19 WT 10.6/40		
7/12/2008	SUPERVISOR:	KENNY MORRIS					MD:	7,170
	0:00 - 14:00	14.00 DRLPF	RO 02	В	Р	DRILL F/6790 TO 7000,AVG 15 WT 10.5/44		
					_	DIO 0570/405		
	14:00 - 14:30	0.50 DRLPF	RO 06	Α	Р	RIG SERVICE		
	14:30 - 0:00	9.50 DRLPF	RO 02	В	Р	DRILL F/7000 TO 7170,AVG 17 WT 10.5/50		
	7.1100 0.00	0.00 D. C.		_				
	s	KENNY NODDIO	- 10-10 · -	-y	<del></del>		MD:	7,565
7/13/2008	SUPERVISOR:	KENNY MURRIS				DRILL F/7170 TO 7379,AVG 17 WT 10.5/47		
7/13/2008	<u>SUPERVISOR:</u> 0:00 - 12:30	12.50 DRLPI	RO 02	В	Р			
7/13/2008			₹О 02	В	Р			
7/13/2008			₹О 02	В				
7/13/2008				В	P P	RIG SERVICE		
7/13/2008	0:00 - 12:30	12.50 DRLPf				RIG SERVICE		
7/13/2008	0:00 - 12:30 12:30 - 13:00	12.50 DRLPf 0.50 DRLPf	30 OF	А	Р			
7/13/2008	0:00 - 12:30	12.50 DRLPf	30 OF	Α		RIG SERVICE DRILL F/7379 TO 7565,AVG 17 WT 10.6/48		
7/13/2008	0:00 - 12:30 12:30 - 13:00	12.50 DRLPf 0.50 DRLPf	30 OF	А	Р			
	0:00 - 12:30 12:30 - 13:00 13:00 - 0:00	12.50 DRLPI 0.50 DRLPI 11.00 DRLPI	30 OF	А	Р		MD:	7,792
7/13/2008	0:00 - 12:30 12:30 - 13:00 13:00 - 0:00	12.50 DRLPf 0.50 DRLPf	RO 02	В	Р		MD:	7,792

Wins No.:	94198			<del></del>	STAT	TE 1021	-32 <u>l</u> API	No.: 430	4739134
1 T. 14 T. / 4 Mar. 17. (	0:00 - 14:00	14.00	DRLPRO	02	В	Р	DRILLF/7565 TO		
	14:00 - 18:00	4.00	DRLPRO	05	Α	Р	DROP SURVEY,PUMPPILL,POOH		
	71.00	1.00	B. (1.1)	-					
						_	OUANIOS DIT 9 MILID MED TILL		
	18:00 - 22:30	4.50	DRLPRO	05	Α	Р	CHANGE BIT & MUD MTR,TIH		
	22:30 - 0:00	1.50	DRLPRO	03	Α	S	WASH & REAM F/6700 TO 7300		
*****			All Printers		<u> </u>			MD:	R 050
7/15/2008	SUPERVISOR:	KENNY MORR	RIS					MD.	0,000
	0:00 - 2:30	2,50	DRLPRO	03	Α	S	WASH & REAM F/7300 TO 7792		
	2:30 - 17:30	15.00	DRLPRO	02	В	Р	DRILL F/7792 TO 7950,AVG 10 WT 10.8/42		
							DIO SERVICE		
	17:30 - 18:00	0.50	DRLPRO	06	Α	Р	RIG SERVICE		
	18:00 ~ 0:00	6.00	DRLPRO	02	В	Р	DRILL F/7950 TO 8050,AVG 17 WT 11/45		
					W#			MD:	8 480
7/16/2008	SUPERVISOR:				_	_	INCREASE ON TO DUMP CARRET	MID.	0,400
	0:00 - 0:30	0.50	DRLPRO	07	В	Р	WORK ON #2 PUMP GASKET		
	0:30 - 17:00	16.50	DRLPRO	02	В	Р	DRILL F/8050 TO 8332,AVG 17 WT 11/43		
	17:00 - 17:30	0.50	DRLPRO	06	Α	Р	RIG SERVICE		
	17:30 - 0:00	6.50	DRLPRO	02	В	Р	DRILL F/8332 TO 8480AVG 17 WT 11.2/45		
				-wi		-n:			2.245
7/17/2008	SUPERVISOR:	KENNY MORI						<u>MD:</u>	8,815
	0:00 - 15:00	15.00	DRLPRO	02	В	Р	DRILL F/8480 TO 8712,AVG 15 WT11.2/48		
	15:00 - 15:30	0.50	DRLPRO	06	Α	Р	RIG SERVICE		
	15:30 - 0:00	8.50	DRLPRO	02	В	Р	DRILL F/8712 TO 8815,AVG 12 WT 11.4/48		
	CUDED\#COD	IZENINO MOD	DIC					MD:	9,210
7/18/2008	SUPERVISOR: 0:00 - 13:30	13.50	DRLPRO	02	В	Р	DRILL F/8815 TO 9060,AVG 18 WT 11.5/46	<del></del>	
	5.00 - 15.50	15,50	2,12,110	J2	2	•	•		
	13:30 - 14:00	0.50	DRLPRO	06	Α	Р	RIG SERVICE		
	14:00 - 21:00	7.00	DRLPRO	02	В	Р	DRILL F/9060 TO		
	14.00 - 21:00	1.00	PIVELINO	02	٥	•			
	21:00 - 22:00	1.00	DRLPRO	04	С	Р	CIRC F/SHORTTRIP		

Wins No.:	94198		and the second s			STA	ΓE 102	1-32I API No.: 4	304739134
	21:00 -		1.00	DRLPRO	04	С	Р	CIRC F/SHORTTRIP	
	22:00 -	- 0:00	2.00	DRLPRO	05	E	Р	SHORTTRIP BACK TO 7500	
7/19/2008	SUPER'	VISOR:	KENNY MORR	IS				MD:	9,210
	0:00	- 2:00	2.00	EVALPR	04	Α	Р	CIRC TO LDDP& BHA	
	2:00	- 10:00	8.00	EVALPR	05	В	Р	LDDP & BHA,PULL WEARRING,DROP=3	
	10:00	- 17:00	7.00	EVALPR	10	С	Р	TRIPLE COMBO W/HALCO,,LOGGERS DEPTH 9148	
	17:00	- 0:00	7.00	CSG	11	В	Р	SM W/TESCO R/U RUN 217 JT & 1 MARKER PROD CSG 9196'	
	CUDED	VIOOD:	WENNY NODE					MD	9,210
7/20/2008	0:00	<u>VISOR:</u> - 1:30	KENNY MORR 1.50	CSG	04	E	Р	CIRC F/PROD CEMENT	. ,
·	1:30	- 3:00	1.50	CSG	15	Α	Р	PUMP 130 SX LEAD &600SX TAIL, DISPLACE 142 BBLSCLAYFIX, FINAL CIRC PSI 3200 GOOD RETURNS, FLOAT HELD, NO CEMENT BACK TO PIT	
	3:00	- 3:30	0.50	RDMO	13	Α	Р	LAND &TEST HANGER,NDBOP	
	3:30	- 6:00	2.50	RDMO	01	E	Р	CLEAN PITS RELEASE@06:00AM 7/20/08	

Wins No.: 9	4198	and the later		and the second	The Market of the Control of the Con	STATI	€ 1021	-321	<u>سند</u> وسندسد داد کام شرک	API No.:	4304739134
EVENT INFORM	ATION:	EVEN	TACTIVITY: CC	MPLETION	1		START	DATE: 8/7/2008		AFE NO	.: 2007881
		OBJE	CTIVE: DEVELO	PMENT			END D	ATE:			
		OBJE	CTIVE 2: ORIGI	NAL			DATE	WELL STARTED PROD	).; i		
		REAS	ON: MV SW	_			Event 8	End Status:			
RIG OPERATION	NS:	Be	gin Mobilization	Rig On	Location	Rig Cha	arges	Rig Operation Start	Finish Drilling	Rig Release	Rig Off Location
KEY 243 / 243											
Date	Access to the contract of	me t-End	Duration (hr)	Phase	Code	Subco de	P/U		Operati	ion	
8/6/2008	SUPER\	/ISOR:	JEFF SAMUELS	3							MD:
	7:00 -	- 17:00	10.00					MOVE RIG F/ STATE	1021-32L. MIRU.	NDWH, NUBOP.	
								PREP & TALLY 2 3/8" PU TBG OFF TRLR. TRU PMP & LINES. BR @ 9150'. CIRC WELL	TAG FILL @ 9106'. K REV CIRC W/ 2	RU DRLG EQUIP	MENT.
								POOH, LD 35 JTS TB0	G. EOT @ 8229'.	SDFN.	
8/7/2008	SUPER	VISOR:	JEFF SAMUELS	S	TO CO. T	XIIIOA.	******				MD:
	7:00	- 14:00	7.00	COMP	33	С	Р	7:00 A.M. HSM CONT TO POOH STD NDBOPE. NU FRAC PSI TST CSG & FRAC SDFD	VLV'S. MIRU B&C	QUICK TST. FILI	CSG &
8/8/2008	SUPER'	VISOR:	JEFF SAMUEL	S	*****						MD:
	7:00	- 15:00	8.00	COMP	46	Ε	Р	RIG & EQUIP ON STA	NDBY. WAIT ON	FRAC CREW	
8/9/2008	SUPER	VISOR:	KEN WARREN								MD:
GIGIZGGG	7:00		0.25	COMP	48		Р	HSM. WORKING W/V	VIRELINE		
	7:15	- 18:30	11.25	COMP	31	Н	×	MIRU WEATHERFOR RIH W/ 3-3/8 EXPEND 9105' COULD NOT GE SHORT JNT, COUNTI W/ WIRE LINE, R/D W N/U BOPE, P/U 3-7/8 TAG UP @ 9094' P/U THROUGH FLOAT SH L/D 29 JNTS, R/D PW R/D TBG EQUIP, N/D IN A.M	O GUN, SET DN @ ET DEEP ENOUGH ED COLLARS TO ! /IRE LINE, FRAC H MILL W/ X-OVER, PWR SWVL, REV! HOE & 52' OF CEM R SWVL, POOH S	9092' BOTTOM P H, PULLED UP CH SET DN, NO DIFF HEAD & FRAC VA RIH W/ 2-3/8 J-55 ERSE CIRC WELL HENT. CIRC HOLE TNDG BACK W/ 2	ERF IS ECKED . POOH LVES, TBG, ., DRL . CLEAN, 62 JNTS.
8/10/2008	SUPER'	VISOR:	KEN WARREN	······································				3705300		~ ~	MD:
	7:00	- 7:15	0.25	COMP	48		Р	HSM, L/D PERF GUN	S		

ins No.:	94198					SIAI	E 1021	
	7:15	- 17:00	9.75	COMP	36	E	Р	PRESSURE TEST CSG TO 7500# W/ WEATHERFORD [GOOD TEST] BLEED WELL OFF.
								STG #1] P/U RIH W/ PERF GUN. PERF MESAVERDE USING 3-3/8 EPEND, 23 GRM, 0.36" HOLE, 3 SPF, 120* PH. 9102'-9105' 9 HOLES, 9082'-9085' 9 HOLES, 9054'-9057' 9 HOLES, 9032'-9035' 9 HOLES, 9014'-9017' 9 HOLES [45 HOLES]
								WHP=0#, BRK DN PERFS @ 3605', INJT PSI=4975#, INJT RT=49.8, ISIP=3570#, FG=.77, PUMP'D 5046.4 bbls sik wtr w/ 1774003 30/50 MESH W/ 5000# RESIN COAT IN TAIL. ISIP=2988#, FG=.76, AR=52.2, AP=4841#, MR=52.6, MP=5634#, NPI=-502#, 43/45 CALC PERFS OPEN.
								STG#2] P/U RIH W/ BKR 8K CBP & PERF GUN. SET CBP @ 8988', PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE, 3 SPF, 120* PH, 8958'-8968' 30 HOLES, 8840'-8845' 15 HOLES.
								WHP=100#, BRK DN PERFS @ 6051#, INNJT PSI=5520#, INJT RT=50.5, ISIP=3620#, FG=.84, PUMP'D 2570 BBLS SLK WTR W/ 89296# 30/50 MESH W/ 5000# RESIN IN TAIL, ISIP=3083#, FG=.78, AR=50.6, AP=4958#, MR=50.8, MP=5042#, NPI=-537#, 40/45 CALC PERFS OPEN.
								STG #3] P/U RIH W/ BKR 8K CBP & PERF GUN, SET CBP @ 8698', PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE, 8662'-8668, 4 SPF, 90* PH, 24 HOLES, 8600'-8606' 3 SPF, 120* PH, 18 HOLES, 8554'-8556' 2 SPF, 180* PH, 4 HOLES, [46 HOLES]
								WHP=0#, BRK DN PERFS @ 3608#, INJT PSI=4954#, INJT RT=50.4, ISIP=3156#, FG=.80, PUMP'D 3030 BBLS SLK WTR W/ 106443# 30/50 MESH W/ 5000# RESIN CAOT IN TAIL. ISIP=3158#, FG=.80, AR=51, AP=4684#, MR=51.6, MP=5062#, NPI=2#, 43/36 CALC PERS OPEN 93%.
								STG #4] P/U RIH W/ BKR 8K CBP & PERF GUN, SET CBP @ 8515', PERF MESAVERDE USING 3-3/8 EXPEND, 23GRM, 0.36" HOLE, 8480'-8485' 4 SPF, 90* PH, 20 HOLES, 8443'-8447' 3 SPF, 120* PH, 12 HOLES, 8397'-8399' 2 SPF, 180* PH, 4 HOLES, 8362'-8364' 2 SPF, 180* PH, 4 HOLES [40 HOLES]
								WHP=0#, BRK DN PERFS @ 3797#, INJT PSI=5084#, INJT RT=51.2, ISIP=3253#, FG=.82, PUMP'D 3481 BBLS SLK WTR W/ 117103# 30/50 MESH W/ 5000# RESIN IN TAIL, ISIP=2870#, FG=.77, AR=51.7, AP=4988#, MR=52.3, MP=5661#, NPI=-383#, 40/40 CALC PERFS OPEN.
								P/U RIH W/ BKR 8K CBP & SET @ 8312', R/D CUTTERS & WEATHERFORD FRAC. N/D FRAC VALVES, N/U BOPE, SWIFN.
13/2008	SUPE	RVISOR:	KEN WARREN		1 + 11 <del>13</del> 4	- 12000 - 13		MD:
-	7:00	- 7:15 - 19:30	0.25 12.25	COMP COMP	48 44	С	P P	HSM, MAKING CONNECTIONS  OPEN WELL 0#, P/U 3-7/8 BIT W/ POBS PKG, RIH W/ 2-3/8 J-55
								TBG TAG KILL PLUG @ 8312'.  PLUG #1] P/U PWR SWVL, EST CIRC W/ RIG PUMP, DRL  THROUGH BKR 8K CBP @ 8312' IN 10 MIN. 800# INCREASE.
								PLUG #2] CONTINUE TO RIH TAG SAND @ 8485' [30' FILL] C/O & DRL THROUGH BKR 8K CBP @ 8515' IN 10 MIN. 400# INCREASE.
								PLUG #3] CONTINUE TO RIH TAG SAND @ 8668' [30' FILL] C/O & DRL THROUGH BKR 8K CBP @ 8698' IN 10 MIN. 500# INCREASE.
								PLUG #4] CONTINUE TO RIH TAG SAND @ 8968' [30' FILL] C/O & DRL THROUGH BKR 8K CBP @ 8998' IN 10 MIN. 300# INCREASE.
								CONTINUE TO RIH C/O TO PBTD @ 9152' CIRC HOLE, R//D PWR SWVL, L/D 16 JNTS ON FLOAT, P/U LUBRICATE HANGER IN WELL, DROP BALL, R/D TBG EQUIP, N/D FRAC VALVES, N/U WELL HEAD, R/U TO PUMP OFF BIT MADE SEVERAL ATTEMPTS & COULD NOT GET BIT PUMP'D OFF. CALLED CUTTERS,MIRU MADE CHEMICAL CUT 10' ABOVE BIT. [NO SEAT NIPPLE] WELL FLOWING UP TBG, TURN OVER TO FLOW BACK CREW.
		,,, <u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	KEN WARRE		···	: ·		MD:

Vins No.:	94198	فليقه مثب ونشير والعباد بيثن مشياس العملاء ونشيوا بدري	العنفان سعيرو بالأرفية المركزيات	STATE 1021	
-	7:00 -		33	A	7 AM FLBK REPORT: CP 2000#, TP 1800#, 16/64" CK, 60 BWPH, MEDIUM SAND, - GAS TTL BBLS RECOVERED: 3220 BBLS LEFT TO RECOVER: 10908
/15/2008	SUPERVISOR:	KEN WARREN			MD:
	7:00 -		33	А	7 AM FLBK REPORT: CP 1800#, TP 1700#, 16/64" CK, 61 BWPH, MEDIUM SAND, - GAS TTL BBLS RECOVERED: 4769 BBLS LEFT TO RECOVER: 9359

			DEPAR			<b>OF UT</b> ATURAI		URCES	3					ENDED Shlight		PORT [		FC	RM 8
		ł	DIVISI										5. Li		SIGNA		SEF	IAL NUME	ER:
WELI	L CON	/IPLE	ΓΙΟΝ	OR F	REC	OMPL	ETIC	N RI	EPOF	RT ANI	) LOG		6, IF	INDIAN,	ALLOT	TTEE OR	TRIBE	NAME	
1a. TYPE OF WELL:	:	C	VELL	] (	GAS WELL	Z	DRY		ОТН	ER			7. U	VIT or CA	AGRE	EMENT 1	IAME		
b. TYPE OF WORK NEW WELL	K; HORIZ. L LATS. L	7 <u>P</u>	DEEP-	] [	RE- ENTRY [	7	DIFF. RESVR.		отн	FR						NUMBER 21-32			
2. NAME OF OPERA KERR Mc	ATOR:									<del></del>	<u>'                                      </u>			PI NUMB		24			
3. ADDRESS OF OF		LaGr	13 011	SHOR	L LP					PHONE	NUMBER:			13047 ELD AND		., OR WIL	DCAT		
1368 S 120	0 E		OITY VE	RNAL	·	STATE	UT	ZIP 840	078		5) 781-70	024	] 1	VATU	IRAL	BUT	TES	3	
4. LOCATION OF W AT SURFACE:			31'FEL											OTR/OTR MERIDIAI	R, SECT N: 32			IP, RANGI	E,
AT TOP PRODUC	CING INTER	RVAL REPO	RTED BEI	-OW:															
AT TOTAL DEPT	H:													INTA			13.	STATE	UTAH
14. DATE SPUDDED 6/6/2008	D:	15. DATE 7/18/2		HED:		E COMPL		A	ABANDON	ED	READY TO PR	RODUCE			VATIO	NS (DF, F	KB, F	RT, GL):	
18. TOTAL DEPTH:	MD 9	210		19. PLUG			9,152		20. IF I	MULTIPLE C	OMPLETIONS,	HOW MA	NY? *	21. DEF	TH BR	IDGE	MD	,	
	TVD					TVD	0,.02						ı	PL	.UG SE		<b>TV</b> D		
22. TYPE ELECTRIC				,		py of each	)			23.						_			
CBL-CCL-G	RIST	o, Ds	$H_iH$	CTR						WAS WEL	L CORED? RUN?		NО 0И		YES [ YES [	= '		analysis) report)	
										DIRECTIO	NAL SURVEY?	·	NO	<u>7</u>	YES	(8	ubmit	сору)	
24. CASING AND LI	NER RECO	RD (Report	t all string:	s set in w	ell)														
HOLE SIZE	SIZE/GF	RADE	WEIGHT	(#/ft.)	TOP	(MD)	вотто	M (MD)		DEMENTER EPTH	CEMENT TY NO. OF SAC		SLUF OLUME		CEM	MENT TOP	**	AMOUNT	PULLED
20"	14"	STL	36.	7#			4	0			28		•						
8 3/4"	7"	J-55	23	#			1,9	950			260							·	
6 1/2"	4 1/2	I-80	11.6	<b>3</b> #			9,2	210			730								
25. TUBING RECOR	RD																		
SIZE	_	SET (MD)	PACK	ER SET (N	MD)	SIZE		DEPTH	SET (MD	PACKE	R SET (MD)	S	IZE		DEPTH	SET (MD		PACKER S	SET (MD)
2 3/8"		,312			i														
26. PRODUCING IN		TOE	(MD)	I POTTO	OM (MD)	TOP	(TVD)	I POTTO	M (TVD)		RATION RECO		SIZE	NO. HO	EQ I	DED		TION STA	TUS
(A) MESAVEI			362		105	101	(140)	Вотто	W (TVD)	8,362	9,1	<u> </u>	0.36	170		Open 🗸		queezed	
•	NDL	- 0,	302	3,	103					0,302	٥, ١	00 0	,.50		-	Open D	_	queezed	
(B)								<del> </del>				$\dashv$			-+	Open		queezed	<u> </u>
(C)		<del>-</del> }				+									<del></del>	Open	-	queezed	
(D)			(EVIT 0011			<u> </u>		ļ								Open L		queezeu	<u> </u>
28. ACID, FRACTUR		MENT, CEM	ENT SQU	EEZE, E I	<del></del>				^**	OUNT AND T	COL MATE	DIAL							
	INTERVAL				07.00		1014.11	00.0			YPE OF MATE		· · · · ·						
8362'-9105'			PIME	7 14,1.	27 BB	LS SL	ICK H	20 & ·	490,24	2# 30/5	0 MESH	<u>20</u>							-
			-							····		400							
29. ENCLOSED AT	TACHMENT	·s·													-	30. V	VEL1	STATUS:	
										_		_				}			
ELECT	RICAL/MEC	HANICAL L	ogs						IC REPOR	$\equiv$	DST REPORT	Ш	DIREC	TIONAL	SURVE	Υ	F	PROE	)
SUNDF	RY NOTICE I	FOR PLUG	GING AND	CEMENT	VERIFIC	CATION		CORE AN	IALYSIS		OTHER:								
														4 X //	-				

(CONTINUED ON BACK)

(5/2000)

RECEIVED SEP 1 1 2008 31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PF	RODUCED:	TEST DA	TE:		HOURS TESTED	D:	TEST PRODUCTIO	N OIL – BBL:	GAS MCF:	WATER	– BBL:	PROD. METHOD:
8/15/2008	3	8/18/	/2008			24	RATES: →	282	1,500	80	)5	FLOWING
CHOKE SIZE:	TBG. PRES	S. CSG. PR	ESS. API G	RAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTIO	ON OIL - BBL:	GAS MCF:	WATER	– BBL:	INTERVAL STATUS:
18/64	1,300	2,2	00				RATES: →	282	1,500	80	)5	PROD
					INT	ERVAL B (As sho	wn in item #26)					
DATE FIRST PF	RODUCED:	TEST DA	ATE:		HOURS TESTED	):	TEST PRODUCTION RATES: →	N OIL BBL:	GAS – MCF:	WATER	– BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRES	S. CSG. PR	ESS. API G	RAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTIO RATES: →	ON OIL - BBL:	GAS - MCF:	WATER	– BBL;	INTERVAL STATUS:
					INT	ERVAL C (As sho	wn in item #26)	•		•		•
DATE FIRST PF	RODUCED:	TEST DA	ATE:		HOURS TESTED	D:	TEST PRODUCTIO RATES: →	N OIL - BBL:	GAS – MCF:	WATER	– BBL:	PROD. METHOD:
CHOKE SIZE;	TBG. PRES	S. CSG. PR	ESS. API G	RAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTIO RATES: →	ON OIL - BBL:	GAS MCF:	WATER	– BBL:	INTERVAL STATUS:
					INT	ERVAL D (As sho	wn in item #26)					
DATE FIRST PR	RODUCED:	TEST DA	TE:		HOURS TESTED	D:	TEST PRODUCTIO RATES: →	N OIL BBL:	GAS - MCF:	WATER	– BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRES	S. CSG. PR	ESS. API G	RAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTIC RATES: →	ON OIL – BBL:	GAS - MCF:	WATER	BBL:	INTERVAL STATUS:
32. DISPOSITION SOLD	ON OF GAS (S	Sold, Used for I	Fuel, Vented, E	tc.)		· I	<del> </del>	'				•
33. SUMMARY	OF POROUS	ZONES (Includ	le Aquifers):					34. FORMATION	(Log) MARKERS:		-	
Show all importatested, cushion of						n tests, including de	epth interval					
Formati	on	Top (MD)	Bottom (MD)		Descrip	tions, Contents, etc	<b>C</b> .	:	Name		(1	Top Measured Depth)
GREEN R	)IVED	847										
MAHOGA		1,421	0.500									
WASATC	н	4,073	6,599									

35. ADDITIONAL REMARKS (Include plugging procedure)

6,927

**MESAVERDE** 

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

SIGNATURE NAME (PLEASE PRINT) SHETLA UPCHEGO
SIGNATURE NAME (PLEASE PRINT) SHETLA UPCHEGO

9,110

LE REGULATORY ANALYST

9/8/2008

This report must be submitted within 30 days of

- · completing or plugging a new well
- · drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

Send to: Utah Division of Oil, Gas and Mining

1594 West North Temple, Suite 1210

Box 145801

Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

<sup>\*</sup> ITEM 20: Show the number of completions if production is measured separately from two or more formations.

<sup>\*\*</sup> ITEM 24: Cement Top - Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

REQUESTS AUTHORIZATION TO COMMINGLE THE NEWLY WASATCH AND MESAVER THE EXISTING MESAVERDE FORMATIONS.  PLEASE REFER TO THE ATTACHED RECOMPLETION PROCEDURE.  NAME (PLEASE PRINT)  SHEILA UPCHEGO  SIGNATURE  OF UTAH DIVISION OF OIL, GAS, AND MINING DATE:  3 / (LOG)	COPY SENT TO OPERATOR  Date: 3 / 2 / 2009  Initials: KS
THE EXISTING MESAVERDE FORMATIONS.  PLEASE REFER TO THE ATTACHED RECOMPLETION PROCEDURE.  NAME (PLEASE PRINT) SHEILA UPCHEGO  SIGNATURE  CITIES SPACE for State USB OF PROVED BY THE STATE  OF UTAH DIVISION OF	COPY SENT TO OPERATOR  Date: 3 / 2 / 2009  Initials: KS  NALYST
THE EXISTING MESAVERDE FORMATIONS.  PLEASE REFER TO THE ATTACHED RECOMPLETION PROCEDURE.  PLAINE (PLEASE PRINT) SHEILA UPCHEGO  SIGNATURE  SIGNATURE  DATE  PLAINE (2/10/2009)	COPY SENT TO OPERATOR  Date: 3 / 2 / 2009  Initials: KS
THE EXISTING MESAVERDE FORMATIONS.  PLEASE REFER TO THE ATTACHED RECOMPLETION PROCEDURE.  NAME (PLEASE PRINT) SHEILA UPCHEGO  TITLE REGULATORY A	COPY SENT TO OPERATOR  Date: 3 / 2 / 2009  Initials: KS
THE EXISTING MESAVERDE FORMATIONS.  PLEASE REFER TO THE ATTACHED RECOMPLETION PROCEDURE.  PLEASE REFER TO THE ATTACHED RECOMPLETION PROCEDURE.	COPY SENT TO OPERATOR  Date: 3 / 2 / 2009  Initials: KS
THE EXISTING MESAVERDE FORMATIONS.	COPY SENT TO OPERATOR  Date: 3,12,2009
THE EXISTING MESAVERDE FORMATIONS.	COPY SENT TO OPERATOR  Date: 3,12,2009
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	DE FORMATION, ALONG WITH
THE OPERATOR PROPOSES TO COMPLETE THE WASATCH AND MESAVERDE FORM	
THE OPERATOR REQUESTS AUTHORIZATION TO RECOMPLETE THE SUBJECT WELL	
12 DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volume	s, etc.
CONVERT WELL TYPE Z RECOMPLETE - DIFFERENT FORMATION	
Date of work completion  COMMINGLE PRODUCING FORMATIONS  RECLAMATION OF WELL SITE	OTHER.
SUBSEQUENT REPORT (Submit Onginal Farm Only)  CHANGE WELL NAME:  PLUG BACK:  PLUG BACK:  PRODUCTION (START/RESUME)	WATER DISPOSAL  WATER SHUT-OFF
CHANGE TUBING PLUG AND ABANDON	VENT OR FLARE
CHANGE TO PREVIOUS PLANS OPERATOR CHANGE	TUBING REPAIR
Approximate date work will start: CASING REPAIR NEW CONSTRUCTION	TEMPORARILY ABANDON
NOTICE OF INTENT   ALTER CASING   FRACTURE TREAT	SIDETRACK TO REPAIR WELL
CODE DEEDEN	REPERFORATE CURRENT FORMATION
TYPE OF SUBMISSION TYPE OF ACTION	RI, OR OTHER DATA
	UTAH
GTR GTR, SECTION, TOWNSHIP, RANGE, MERIDIAN NESE 32 10S 21E	STATE
FOOTAGES AT SURFACE: 2208'FSL, 1231'FEL	COUNTY: UINTAH
1368 SOUTH 1200 EAST VERNAL UT 84078 (435) 781-7024	NATURAL BUTTES
KERR McGEE OIL & GAS ONSHORE LP  3. ADDRESS OF OPERATOR PHONE NUMBER:	16. FIELD AND POOL, OR WILDCAT
2. NAME OF OPERATOR	9. API NUMBER: 4304739134
	8. WELL NAME and NUMBER STATE 1021-321
1. TYPE OF WELL OIL WELL GAS WELL V OTHER	UNIT #891008900A
Do not use this form for proposals to drift new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drift horizontal laterals. Use APPLICATION FOR PERMIT TO ORILL form for such proposals  1. TYPE OF WELL  OIL WELL  GAS WELL  OTHER	7. UNIT or CA AGREEMENT NAME
Do not use this form for proposals to drift new wells, significantly deepen existing wells below current bottom-hole depth, reenfer plugged wells, or to drift horizontal laterals. Use APPLICATION FOR PERMIT TO ORILL form for such proposals	
drili horizontal laterals. Use APPLICATION FOR PERMIT TO ORILL form for such proposals	ML-21577  6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

Name: <u>State 1021-32I</u>

Location: NE SE Sec 32 T10S R21E

**Uintah County, UT** 

Date:

01/07/2009

**ELEVATIONS:** 

5306 GL

5322 KB

TOTAL DEPTH:

9210

**PBTD:** 9152

**SURFACE CASING:** 

9 5/8", 36# J-55 ST&C @ 1934' 4 1/2", 11.6#, I-80 LT&C @ 9196'

Marker Joint **4028-4049**'

#### **TUBULAR PROPERTIES:**

**PRODUCTION CASING:** 

	BURST	COLLAPSE	DRIFT DIA.	CAPACITIES	
	(psi)	(psi)	(in.)	(bbl/ft)	(gal/ft)
2 3/8" 4.7# J-55	7,700	8,100	1.901"	0.00387	0.1624
tbg					
4 ½" 11.6# I-80	7780	6350	3.875"	0.0155	0.6528
(See above)					
2 3/8" by 4 ½"				0.0101	0.4227
Annulus					

#### **TOPS:**

911' Green River

992' Birds Nest

1504' Mahogany

4060' Wasatch

6886' Mesaverde

Estimated T.O.C. from CBL @4100

#### **GENERAL**:

- A minimum of **29** tanks (cleaned lined 500 bbl) of recycled water will be required. Note: Use biocide in tanks and the water needs to be at least 45°F at pump time.
- All perforation depths are from Halliburtons Induction-Density-Neutron log dated 07/19/2008
- 6 fracturing stages required for coverage.
- Procedure calls for 7 CBP's (8000 psi).
- Calculate open perforations after each breakdown. If less than 60% of the perforations appear to be open, ball out with 15% HCl.
- Put scale inhibitor 3 gals/1000 gals (in pad and ½ the ramp) and 10 gals/1000 gals in all flushes except the final stage. Remember to pre-load the casing with scale inhibitor for the very first stage with 10 gpt.
- 30/50 mesh Ottawa sand, Slickwater frac.
- Maximum surface pressure 6200 psi.

- Flush volumes are the sum of slick water and acid used during displacement (include scale
  inhibitor as mentioned above). DO NOT OVERDISPLACE. Stage acid and scale inhibitor
  if necessary to cover the next perforated interval.
- Service companies need to provide surface/production annulus pop-offs to be set for 1500 psi for each frac.
- Pump 20/40mesh resin coated sand last 5,000# of all frac stages
- Tubing Currently Landed @~8992' with packer
- Originally completed on 8/12/2008

#### **Existing Perforations:**

8364	2	4
8399	2	4
8447	3	12
8485	4	20
8556	2	4
8606	3	18
8668	4	24
8845	3	15
8968	3	30
9017	3	9
9035	3	9
9057	3	9
9085	3	9
9105	3	9
	8399 8447 8485 8556 8606 8668 8845 8968 9017 9035 9057 9085	8399 2 8447 3 8485 4 8556 2 8606 3 8668 4 8845 3 8968 3 9017 3 9035 3 9057 3 9085 3

#### **PROCEDURE**:

- 1. MIRU. Control well with recycled water and biocide as required. ND WH, NU BOP's and test.
- 2. Release packer and TOOH with 2-3/8", 4.7#, J-55 (or N-80) tubing (currently landed at ~8992' with packer'). Visually inspect for scale and consider replacing if needed.
- 3. If the looks ok consider running a gauge ring to 8286 (50' below proposed CBP). Otherwise P/U a mill and C/O to 8286 (50' below proposed CBP).
- 4. Set 8000 psi CBP at  $\sim$  8236'. Pressure test BOP and casing to 6000 psi. .
- 5. Perf the following with 3-3/8" gun, 23 gm, 0.36"hole:

```
Zone From To spf # of shots MESAVERDE 8211 8226 3 45
```

- 6. Breakdown perfs and establish injection rate (<u>include scale inhibitor in fluid</u>). Spot 250 gals of 15% HCL and let soak 5-10 min. Fracture as outlined in Stage 1 on attached listing. Under-displace to ~8161' and trickle 250gal 15%HCL w/ scale inhibitor in flush.
- 7. Set 8000 psi CBP at  $\sim$ 8032'. Perf the following 3-3/8" gun, 23 gm, 0.36"hole:

```
        Zone
        From
        To
        spf
        # of shots

        MESAVERDE
        7898
        7900
        4
        8

        MESAVERDE
        7958
        7962
        4
        16
```

- 8. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 2 on attached listing. Under-displace to ~7848' and trickle 250gal 15%HCL w/ scale inhibitor in flush.
- 9. Set 8000 psi CBP at  $\sim$ 7758'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

Zone From To spf # of shots MESAVERDE 7624 7628 3 12 MESAVERDE 7718 7728 3 30

- 10. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 3 on attached listing. Under-displace to ~7574' trickle 250gal 15%HCL w/ scale inhibitor in flush.
- 11. Set 8000 psi CBP at  $\sim$ 7480'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

Zone From To spf # of shots MESAVERDE 7368 7372 4 16 MESAVERDE 7444 7450 4 24

- 12. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 4 on attached listing. Under-displace to ~7318' and trickle 250gal 15%HCL w/ scale inhibitor in flush.
- 13. Set 8000 psi CBP at ~7132'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

Zone From To spf # of shots MESAVERDE 7092 7102 4 40

- 14. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 5 on attached listing. Under-displace to ~7042' and trickle 250gal 15%HCL w/ scale inhibitor in flush.
- 15. Set 8000 psi CBP at  $\sim$ 6010'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

Zone From To spf # of shots WASATCH 5970 5980 4 40

- 16. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 6 on attached listing. Under-displace to ~5920' and flush only with recycled water.
- 17. Set 8000 psi CBP at ~5920'.
- 18. TIH with 3 7/8" mill, pump off bit sub, SN and tubing.
- 19. Mill plugs (DRILL ISOLATION PLUG @ 8236') and clean out to 9152. Land tubing at ±8810' and pump off bit sub unless indicated otherwise by the well's behavior. This well will be commingled at this time.
- 20. RDMO
- 21. Clean out well with foam and/or swabbing unit until steady flow has been established from recomplete.

For design questions, please call Curtis Caile, Denver, CO (406)-490-2742 (Cell) (720)-929-6194 (Office)

For field implementation questions, please call Robert Miller, Vernal, UT 4350781 7041 (Office)

NOTES:

This is the recompletion of a mudstone test.

Zone	Feet of Pay 7	Perfs op, ft. Bot., ft	SPF	Holes	Rate BPM	Fluid Type	Initial ppg	Final	Floid	Volume gals	Cum Vol gals	Volume BBLs	Cum Vol BBLs	Fluid % at frac	Sand % of frac	Sand	Cum. Sand lbs	Footage from CBP to Flush	Inh g:
MESAVERDE	10	8211 8226	3	45		Pump-in test			Stickwater		0	0	0						5
MESAVERDE MESAVERDE	18	No Perfs No Perfs				ISIP and 5 min ISIP Stickwater Pad			Slickwater	14,163	14,163	337	337	15.0%	0.0%	0	0		4
MESAVERDE	1	No Ports			50	Stickwater Ramp	0.25	1	Slickwater	26,753	40,916	637	974	28.3%	16.7%	16,721	16,721		- 4
MESAVERDE	0	No Peds				SW Sweep	D		Slickwater	0	40,910	0	974	20000	0.0%	0	16,721		10
MESAVERDE	1	No Perfs				Elickwater Ramp	- 1	1.5	Stickwaler	26,753	67,669	637	1,611	28 3%	33.4%	33,441	50,162		- 4
MESAVERDE	0				50	SW Sweep Slickwater Ramp	0.5		Stickwater Stickwater	5,250	72,919 75,919	125 71	1,736		3.0%	3,000	50,162 53,162		
MESAVERDE MESAVERDE	0					Stickwater Pamp	1.5		Stickwater	3,000 28,753	99,672	637	2,373	28 3%	46.8%	46,818	99,980		1 3
MESAVERDE	0					Flush (4-1/2")			STREET, STREET,	5,328	105,000	127	2,500	550-500	0.00.00		99,980		
MESAVERDE	0					ISDP and 5 min ISDF		ľ		-6310	105,000		324				550000		2
MESAVERDE	0						1	li		. 1									
MESAVERDE	0								Sand laden V	Columns.	94.422					1			
MESAVERDE									Sand Jacobs A	emme	SHAZE				gal/R	4,496	4,761	llis sand/It	
_	21	# of Parfs	s/stage	45	50.0	Above pump time	(mm)					F	ush depth	8161		BP depth	8,032	129	
MESAVERDE MESAVERDE	2	7696 7900 7958 7962	4	8 16		Pump in test ISIP and 5 min ISIP			Stokwater		0	0	.0						
MESAVERDE	6	7998 8002	4	16		Slickwater Pad			Stickwater	11,044	11,044	263	263	15.0%	0.0%	0	0		
MESAVERDE	11	No Perfs				Slickwater Ramp	0.25		Slickwater	20,861	31,905	497	760	28.3%	16.6%	13,038	13,038		1
MESAVERDE	2	No Perfs			50	SW Sweep	0	0	-citizani area	0	31,905		760	200.000	0.0%	26.076	13,038		
MESAVERDE MESAVERDE	13	No Peris No Peris				Stickwater Ramp SW Sweep	0	1.5		20,861 <b>6,260</b>	52,766 58,016	497 125	1,256 1,381	28.3%	93.2%	26,075	39,114 39,114		
MESAVERDE	10	No Perfs				Slickwater Rame	0.5		Stickwater	3,000	61,016	71	1,453		3.8%	3,000	42,114		11 7
MESAVERDE	1	No Perís				Stickwater Ramp	1.5		Stickwater	20,861	78,877	497	1,878	28.3%	46.4%	36 507	78,621		1
MESAVERDE	3	No Perfs			50	Flush (4-1/2")				5,123	84,000	122	2,000				78,621		
MESAVERDE	8	No Perfs				ISDP and 5 min ISDE	1				84,000								
MESAVERDE MESAVERDE	- 24	No Perís No Perís																	
MESAVERDE	5	No Perfs							Sand laden V	falume	73,627								
THE COUNTY OF TH	66	# of Perf		40							1.1.3.4.5.5.7.	F	ush depth	7848	gal/n	1.124 BP depth		lls sand/fi 90	
			suage	37	37 6	Above pump time	(min)		Ot to the		0	·	6	70-13		or depart	1,700		1
MESAVERDE MESAVERDE	0	7624 7628 7718 7728	3	12		Pump in test ISIP and 5 min ISIP			Stickwater		5.9	U	.0						
MESAVERDE	9	No Perfs	į,	30		Slickwater Pad			Stickwater	18,949	18,949	451	451	15.0%	0.0%	. 0	0		
MESAVERDE	- 6	No Perts			50	Sickwater Ramp	0.25		Stickwater	35,793	64,742	852	1,303	28.3%	16.9%	22,370	22,370		
MESAVERDE	6	No Ports				SW Sweep	0	0	Stickwater	5,250	59,992	125	1,428	200	0.0%	40.744	22,370		
MESAVERDE MESAVERDE	0	No Perfs				Stickwater Romp SW Sweep	1 0		Stickwoter Stickwater	35,793 10,500	95,784 106,284	852 250	2,281 2,531	28 3%	33.7%	44,741	67,111 67,111		
MESAVERDE	2	No Perfs				SW Sweep Slickwater Ramp	0.5		Shokwater	3,000	109,284	71	2,602		2.3%	3,000	70,111		
MESAVERDE	6	No Peris			50	Stickwater Ramp	1.5		Stickwater	35,793	142,077	852	3,383	28.3%	47.2%	62,637	132,748		
MESAVERDE	6	No Parte				Fourth (4-1/2")	777.5		- AC-2	4.944	147 021	118	3,500	1000			132,748		-
MESAVERDE	18	No Perfs				ISCP and 5 min ISDA					147,021								
MESAVERDE MESAVERDE	4	No Perfs.																	
MESAVERDE	0								Sand laden V	clume	126,327						(00.58%)	0.50	
STATES	63	# of Perf	elutano	42					3/2 1/4 1/4 1/4 1/4		14650001125	F	lush depth	7574	gal-fr	2,005 CBP depth		lbs sand/fi 94	
MESAVERDE	0	7368 7372				<< Above pump time Pump-in test	(min)		Stekwater		0	0	0	eric Salain)			ndiseas.		
MESAVERDE	11	7368 7372 7444 7450	- 5	16		Pump-in test ISIP and 5 min ISIP			Peckyater			Ų							
MESAVERDE	2	No Perfs		- 1		Stickwater Parl			Stickwater	11,105	11,105	264	284	15.0%	0.0%	0	0		1 8
MESAVERDE	2	No Peris			50	Stickwater Ramp	0.25		Shekwater	20,976	32,081	499	764	26 3%	16.6%	13,110	13,110		1 8
MESAVERDE	-	No Perfe				SW Sweep	- 0		Stickwater	0	32,081	0	764	2555	0.0%	0	13,110		
MESAVERDE	1	No Parts		1 1		Slickwater Ramp	1		Stickwater	20,976	53,056 58,306	499 125	1,263 1,388	26.3%	33.2%	26,220 0	39,330 39,330		
MESAVERDE MESAVERDE	0	No Peris No Peris				SW Sweep Slickwater Ramp	0.5		Stickwater	5,250 3,000	61,308	71	1,460		3.0%	3,000	42,330		
MESAVERDE	0	Nu Perfe				Stickwater Romp	1.5		Stekwater	20,976	79 282	499	1,888	28.3%	46.4%	36,708	79,037		
MESAVERDE	17	No Perfs			50	Flanh (4-1/2*)				4,777	84,059	114	2,001				79,637		_
MESAVERDE	- 6	No Perfs				ISDP and 5 min ISDI	5				84,059		1-100011						
MESAVERDE	0	No Perfs																	
MESAVERDE MESAVERDE	0	No Perts							Sand laden V	folume:	74,032						71222	POCHERONIN	
	82	# of Perf	sutage	40								F	ush depth	7318	gat/ft	903 BP depth		lbs sand/fl 186	
MESAVERDE	2	7092 7102	A	an	37.8 ∀aned	Above pump time Pump-in test	(mm)		Stickwater		0	0	0						
MESAVERDE	0	No Peris			0	ISIP and 5 min ISIP				- 3.4			0000						
MESAVERDE	9	No Perfs				Slickwater Pad	2000	9.11	Shokwater	8,768	8,768	209	209	15.0%	0.0%	0	0		
MESAVERDE	1	No Perfs			50	Stickwater Ramp	0.25		Stickwater Stickwater	16,561	25,329	394 0	603 603	28 3%	17.2%	10,351 0	10,351 10,351		
MESAVERDE MESAVERDE	0 1B	No Perfs No Perfs				SW Sweep Stickwater Ramp	0 1		Slickwater	16,561	25,329 41,890	394		26 3%	0.0%	20,701	31,052		
MESAVERDE	18	No Perfs No Perfs				SW Sweep	0		Stickwater	10,301	41,890	0	997	20 376	0.0%	20,701	31,052		
MESAVERDE	1	No Perfs			50	Slickwater Ramp	0.5	1.5	Slickwater	0	41.890	0	997	(524)	0.0%	0	31,052		1
MESAVERDE	16	No Perfs			50	Sickwater Ramp	1.5		Slickwater	16,561	58,451	394	1,392	29 3%	48 3%	28,982			1
MESAVERDE	2	No Perfs			50	Flush (4-1/2")				4,597	63,048	109	1,501				80,034		$\vdash$
MESAVERDE MESAVERDE	0					ISDP and 5 min ISDI	í				63,048								
MESAVERDE	0																		
MESAVERDE	0								Sand laden V	/olume	58,451				1000		3 200	1000000000	
	49	# of Park	s/stage	340								F	ush depth	7042	gal/h	1,205 CBP depth	1,238 6,010	16s sand/ft 1,032	
MARATON						<< Above pump time	(min)		Stetomen		0	0	0					10000	
WASATCH WASATCH	19	5970 5980 No Perfs	4	:40)	0	Pump in test ISIP and 5 min ISIP			Stickwater	15254			0.000	2,2100	772423		122		
WASATCH	0	No Perfs				Stickwater Pad	- Section	14	Stickwater	5,720	5,720	136 257	136 393	15.0%	0.0%	6,753	6,753		
WASATCH	0					Stickwater Ramp	0.25		Stickwater	10,805	16,525 18,525	257	393	28.3%	15.2%	0,753	6,753		
WASATCH WASATCH	0					SW Sweep Stickwater Ramp	1		Stekwater	10,805	27,330	257	651	26.3%		13,506			
WASATCH	0					SW Sweep	0	0		0	27,330	0	651		0.0%	. 0	20,259		
WASATCH	0				50	Slickwater Ramp	0.5		Stickwater	0	27,330	0	651	00-500	0.0%	0.00			1
WASATCH	0					Slickwater Ramp	1.5	3	Shokwater	10,805	38,135	257	908	26 3%	51.6%	24,311	44,571		
WASATCH WASATCH	0.0				:50	Flush (4-1/2") ISDP and 5 min ISDI	L			3,865	42,000 42,000	92	1,000				44,571		1
	0					TODE and 0 min ISDI	Ť				42,000								3
	0										y								
WASATCH WASATCH	0								Sand laden \	Zoltime	38,135				gal/ft	2,061	2.400	lls sand/ft	
WASATCH	7,00,11		1	2233									lush depth	5920		CBP depth		Iths sand/II	LO
WASATCH WASATCH	19	# of Perf	s'stage	40									tour ochur	0520		obi depair	9,920	10	1
WASATCH WASATCH		# of Peri	s/stage	247	16:2			2011		Total Fluid	520,351		12,503	College A	CIPA	Total Sand	erinare.		10000

. .

	Zones	Perfi Top, ft	Bottom, ft	SPF	Holes	Frac	cture Cover	age
	MERAVEDDE	8211	8226	3	45	8161	to	8161.5
1		8211			4:5	8211.5	to	8229
	MESAVERDE		No Perfs					8232
	MESAVERDE		No Perfs			8230.5	to	
	MESAVERDE		No Perfs			8234	to	823
	MESAVERDE		No Perfs			8254.5	to	8254.5
	MESAVERDE		No Perfs			8255.5	to	8250
	# of Perfs/stage				45	CBP DEPTH	8,032	
	1							
2	MESAVERDE	7898	7900	4	8	7871	to	7871.
	MESAVERDE	7958	7962	4	16	7872.5	to	787
	MESAVERDE	7998	8002	4	16	7876.5	to	788
	MESAVERDE	7 3 3 3	No Perfs	<del></del>		7884	to	7884.
						7887.5	to	7889
	MESAVERDE		No Perís					
	MESAVERDE		No Perfs			7890.5	to	7894.
	MESAVERDE		No Perfs			7897.5	to	7910.
	MESAVERDE		No Perfs			7917.5	to	792
	MESAVERDE		No Perfs		,	7929	to	7929.
	MESAVERDE		No Perfs			7949	to	7951.
	MESAVERDE		No Perfs			7957.5	to	7965.
								7968.
	MESAVERDE		No Perfs			7960	to	
	MESAVERDE		No Perfs			7969.5	to	7970.
	MESAVERDE		No Perfs			7973	to	797 <u>7.</u>
	MESAVERDE		No Perfs			7988	to	7990.
	MESAVERDE		No Perfs			7992	to	799
	MESAVERDE		No Perfs			7997.5	to	8006
								8008
	MESAVERDE	<b></b>	No Perfs			8007	to	
	MESAVERDE		No Perfs			8023	to	8024.
	MESAVERDE		No Perfs			8027	to	8029
	MESAVERDE		No Perfs			8036.5	to	803
	# of Perfs/stage				40	CBP DEPTH	7,758	
	w orr ensystage					35. 22		
	LIEDOVEDDE	7004	7628		12	7568	to	7568
J	MESAVERDE	7624		3				
	MESAVERDE	7718	7728	3	30	7590	to	7595.
	MESAVERDE		No Perfs			7612.5	to	7621.5
	MESAVERDE		No Perfs			7623	to	7630.9
	MESAVERDE		No Perfs			7635	to	764
	MESAVERDE		No Perfs			7645.5	to	7645.5
								·
	MESAVERDE		No Perfs			7682	to	7682
	MESAVERDE		No Perfs			7688	to	7689.5
	MESAVERDE		No Perfs			7691.5	to	7697.5
	MESAVERDE		No Perfs			7699.5	to	7705.5
	MESAVERDE		No Perfs			7717.5	to	7735.5
	MESAVERDE		No Perfs			7754	to	7757.5
	# of Perfs/stage	-	Morens		42	CBP DEPTH	7,480	1107.0
	# UI Fells/stage					CBI DEL III	7,400	
	MEGAMERSE	7368	7372	4	16	7264	to	7264
-4	MESAVERDE							
	MESAVERDE	7444	7450	4	24	7273	to	7283.5
	MESAVERDE		No Perfs			7309	to	7311
	MESAVERDE		No Perfs			7315.5	to	73 <u>17</u>
	MESAVERDE		No Perfs			7323.5	to	7332
	MESAVERDE		No Perfs			7341.5	to	7342
	MESAVERDE		No Perfs			7346	to	7346
		<del> </del>	No Perfs		-	7354	to	7355
	MESAVERDE	ļ						
	MESAVERDE	ļ	No Perfs			7356	to	7356
	MESAVERDE		No Perfs			7365.5	to	7382.5
	MESAVERDE	1	No Perfs	<b>I</b>		7386	to	7390.5
	MEGALIEFE							
	MESAVERDE		No Perfs			7407.5	to	
			No Perfs					7407.5
	MESAVERDE		No Perfs No Perfs			7407.5	to	7407.5 7414
	MESAVERDE MESAVERDE		No Perfs No Perfs No Perfs			7407.5 7414 7416.5	to to to	7407.5 7414 7425
	MESAVERDE MESAVERDE MESAVERDE		No Perfs No Perfs No Perfs No Perfs			7407.5 7414 7416.5 7441.5	to to to	7407.5 7414 7425 7458
	MESAVERDE MESAVERDE MESAVERDE MESAVERDE		No Perfs No Perfs No Perfs No Perfs No Perfs			7407.5 7414 7416.5 7441.5 7463.5	to to to to	7407.9 7414 7429 7458 7464
	MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE		No Perfs			7407.5 7414 7416.5 7441.5 7463.5 7496.5	to to to to to	7407.5 741- 742: 745: 746- 749:
	MESAVERDE MESAVERDE MESAVERDE MESAVERDE		No Perfs No Perfs No Perfs No Perfs No Perfs			7407.5 7414 7416.5 7441.5 7463.5 7496.5 7501.5	to t	7407. 741. 742. 745. 746. 749.
	MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE		No Perfs			7407.5 7414 7416.5 7441.5 7463.5 7496.5 7501.5	to to to to to	7407.9 741- 7429 7450 7460 7490 750
	MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE		No Perfs			7407.5 7414 7416.5 7441.5 7463.5 7496.5 7501.5	to t	7407.5 741. 742. 746. 746. 749. 750.
	MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE		No Perfs			7407.5 7414 7416.5 7441.5 7441.5 7496.5 7496.5 7501.5 7515.5 7518.5	to	7407.9 7411 7429 7466 7466 7499 7500 7516.3
	MESAVERDE		No Perfs		40	7407.5 7414 74165 7441.5 7463.5 7496.5 7501.5 7515.5 7518.5	to t	7407.9 7411 7429 7466 7466 7499 7500 7516.3
	MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE		No Perfs		40	7407.5 7414 7416.5 7441.5 7441.5 7496.5 7496.5 7501.5 7515.5 7518.5	to	7407.4 741. 742. 745. 746. 749. 750. 7516.3
	MESAVERDE # of Perfs/stage		No Perfs			7407.5 7414 7416.5 7441.5 7463.5 7496.5 7501.5 7515.5 7518.5 7523.6 CBP DEPTH	to t	7407.4 741.1 742.2 745.1 746.7 749.2 750.7 7516.2 752.7 752.7
5	MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE # of Perfs/stage	7092	No Perfs	4	40	7 407.5 7414 77416 74165 7441.5 7463.6 77965 7501.5 7515.5 7518.5 7523.6 CBP DEPTH	to t	7407.4 7411 7421 7451 7451 7461 7461 7501 7516.2 7521 7003.8
5	MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE # of Perfs/stage MESAVERDE MESAVERDE	7092	No Perfs	4		7407.5 7414 7416.5 7441.5 7463.5 7496.5 7501.5 7518.5 7523.5 CBP DEPTH	to t	7407.4 741. 742. 745. 746. 746. 748. 749. 750. 7516. 752. 752. 7003.
5	MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE # of Perfs/stage	7092	No Perfs	4		7407.5 7414 7416.5 7441.5 7463.5 7496.5 7501.5 7518.5 7518.5 7523.5 CBP DEPTH 7002 7010.5 7013.5	to t	7407.4 741.1 742.1 745.1 746.1 746.1 749.1 750.1 7516.1 752.1 7003.1 7010.1 702.1
5	MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE # of Perfs/stage MESAVERDE MESAVERDE	7092	No Perfs	4		7407.5 7414 7416.5 7441.5 7463.5 7496.5 7501.5 7518.5 7523.5 CBP DEPTH	to t	7407.6 7411 7422 7456 7456 7456 7496 7500 7516. 7522 7622 7003.
5	MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE # of Perfs/stage  MESAVERDE	7092	No Perfs	4		7407.5 7414 7416.5 7441.5 7463.5 7496.5 7501.5 7518.5 7518.5 7523.5 CBP DEPTH 7002 7010.5 7013.5	to t	7407.4 7411 7421 7451 7461 7461 7461 7461 7510 7510 752 762 7003
5	MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE # of Perfs/stage  MESAVERDE	7092	No Perfs	4		7 407.5 7 414 7 416.5 7 441.5 7 463.5 7 463.5 7 501.5 7 515.5 7 518.5 7 523.5 CBP DEPTH 7002 7010.5 7013.5 7054	to t	7407.4 741.1 742.1 745.1 746.1 746.1 748.1 751.1 751.1 751.1 7003.1 7010.1 702.1 7054.1 7071.1
5	MESAVERDE	7092	No Perfs	4		7407.5 7414 7416.5 7441.5 7463.5 7496.5 7501.5 7515.5 7518.5 7523.5 CBP DEPTH 7002 7010.5 7013.5 7054 7071.5 7071.5	to t	7407.4 741. 742. 745. 746. 746. 749. 750. 7516. 752. 752. 7003. 7010. 702. 7054. 7071.
5	MESAVERDE	7092	No Perfs	4		7 407.5 7 7414 7 7416 7 7416 7 7416 7 7486.5 7 7496.5 7 7515.5 7 518.5 7 523.6 CBP DEPTH 7002 7010.5 7013.5 7054 7071.5 7087	to t	7407.4 7411. 7421. 7451. 7451. 7451. 7451. 7451. 7451. 7510. 7510. 7621. 7003. 7010. 7010. 7101. 7101. 7101.
5	MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE # of Perfs/stage  MESAVERDE	7092	No Perfs	4		7 407.5 7 414 7 416.5 7 441.5 7 463.5 7 463.5 7 501.5 7 515.5 7 518.5 7 523.5 CBP DEPTH  7 002 7 010.5 7 013.5 7 071.5 7 087 7 111.5 7 111.5	to t	7407.4 741.1 742.1 745.1 746.1 746.1 746.1 746.1 751.1 751.1 761.1 761.1 761.1 761.1 761.1 761.1 761.1 761.1 761.1 761.1
5	MESAVERDE	7092	No Perfs	4		7407.5 7414 7416.5 7441.5 7463.5 7496.5 7501.5 7518.5 7518.5 7523.5 CBP DEPTH  7002 7010.6 7013.5 7054 7071.5 7087 7111.5 7111.5	to t	7407.5 7411 7422 7456 7466 7496 7502 7516.6 7522 7003.6 7010.6 7021 7011 7111 7113
5	MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE # of Perfs/stage  MESAVERDE	7092	No Perfs	4		7 407.5 7 414 7 416.5 7 441.5 7 463.5 7 463.5 7 501.5 7 515.5 7 518.5 7 523.5 CBP DEPTH  7 002 7 010.5 7 013.5 7 071.5 7 087 7 111.5 7 111.5	to t	7407.5 7411 7422 7456 7466 7496 7502 7516.6 7522 7003.6 7010.6 7021 7011 7111 7113
5	MESAVERDE	7092	No Perfs	4		7407.5 7414 7416.5 7441.5 7463.5 7496.5 7501.5 7518.5 7518.5 7523.5 CBP DEPTH  7002 7010.6 7013.5 7054 7071.5 7087 7111.5 7111.5	to t	7407.5 7411 7422 7456 7466 7496 7502 7516.6 7522 7003.6 7010.6 7021 7011 7111 7113
5	MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE # of Perfs/stage  MESAVERDE	7092	No Perfs	4	40	7 407.5 7 7414 7 7416 7 7416 7 7416 7 7486 7 7486.5 7 7696.5 7 7518.5 7 7523.6 CBP DEPTH  7002 7010.5 7013.6 7054 7071.5 7087 7111.5 7114.5 7117.5	to t	7407.5 7411 7422 7456 7466 7496 7502 7516.6 7522 7003.6 7010.6 7021 7011 7111 7113
	MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE # of Perfs/stage  MESAVERDE # of Perfs/stage		No Perfs		40	7407.5 7414 7416.5 7416.5 7441.5 7463.5 7496.5 7501.5 7515.5 7518.5 7523.5 CBP DEPTH  7002 7010.5 7013.5 7054 7071.5 7087 7111.5 7113.5 CBP DEPTH	to t	7407.6 7414 7426 7456 7456 7456 7456 7500 7516.6 7522 7003.6 7010.6 7071.6 7113 7111 7113.6
	MESAVERDE	7092	No Perfs	4	40	7 407.5 7 7414 7 7416 7 7416 7 7416 7 7486.5 7 7496.5 7 7515.5 7 7518.5 7 523.6 CBP DEPTH  7002 7010.5 7013.5 7054 7071.5 7087 7111.5 7114.5 7117.5 7135.6 CBP DEPTH	to t	7407.6 7414 7426 7458 7468 7469 7507 7516.6 7524  7003.6 7010.6 7071.6 7113 7113 7113 7137.6
	MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE # of Perfs/stage  MESAVERDE # of Perfs/stage  WASATCH		No Perfs		40	7 407.5 7 7414 7 7416 7 7416 7 7416 7 7463.5 7 7463.5 7 7515.5 7 7515.5 7 7518.5 7 7523.5 CBP DEPTH  7 002 7 010.5 7 013.5 7 057 7 111.5 7 111.5 7 111.5 7 115.5	to t	7407.5 7414 7425 7458 7484 7495 7507 7516.5 7524 7003.5 7010.6 7022 7054.5 7113 7115 7133.5 7137.5
	MESAVERDE		No Perfs		40	7 407.5 7414 77416 77416 77416 77416 77463.5 77496.5 7501.5 7501.5 7518.5 7523.5 CBP DEPTH  7002 7010.5 7013.5 7054 7071.5 7111.5 7111.5 71135.5 CBP DEPTH	to t	7407.6 77414 77426 77456 77456 77456 77456 77507 77516.6 77524 7703.6 77010.6 77012 77054.6 77113 77115 77137.6
	MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE MESAVERDE # of Perfs/stage  MESAVERDE # of Perfs/stage  WASATCH		No Perfs		40	7 407.5 7 7414 7 7416 7 7416 7 7416 7 7463.5 7 7463.5 7 7515.5 7 7515.5 7 7518.5 7 7523.5 CBP DEPTH  7 002 7 010.5 7 013.5 7 057 7 111.5 7 111.5 7 111.5 7 115.5	to t	7407.6 77414 77426 77456 77456 77456 77456 77507 77516.6 77524 7703.6 77010.6 77012 77054.6 77113 77115 77137.6
	MESAVERDE WESAVERDE WESAVERDE WESAVERDE WESAVERDE WESAVERDE WESAVERDE		No Perfs		40	7 407.5 7414 77416 77416 77416 77416 77463.5 77496.5 7501.5 7501.5 7518.5 7523.5 CBP DEPTH  7002 7010.5 7013.5 7054 7071.5 7111.5 7111.5 71135.5 CBP DEPTH	to t	7407.6 7414 7426 7458 7468 7469 7507 7516.6 7524  7003.6 7010.6 7071.6 7113 7113 7113 7137.6

Zone	Feet of Pay		erfs Bot., ft	SPF	Holes	Rate 8PM	Fluid Type	Initial ppg	Final ppg	Fluid	Volume gals	Cum Vol gals	Volume BBLs	Cum Vol BBLs	Fluid % of frac	Sand	Sand Ibs	Cum, Sand lbs	Footage from CBP to Flush	Sc Inh
MESAVERDE	1	8211	8226	-	45	Varied	Pump-in test	ESS	reson	Slickwater		o	0	0						-
MESAVERDE	18	OLII	No Perfs	.5	34	0	ISIP and 5 min ISIP				(1000)	127			10.000	1000.0000				1
MEGAVERDE	2		No Perfs				Slickwater Pad Slickwater Ramp	0.25		Sliciowater Sliciowater	14,163	14.163 40.916	337 637	337 974	15.0%	0.0%	16,721	16,721		
MESAVERDE MESAVERDE	0		No Perfs No Perfs				SW Sweep	0.25	ů	Sticlowater	26.753	40.916	037	974	20.3%	0.0%	10,721	16,721		8
MESAVERDE	1		No Perfu			50	Stickwater Flame	1		Sliplowator	26,753	67,669	637	1,611	28.3%	33.4%	33,441	50.162		9
MESAVERDE	0						SW Sweep	0.6		Slickwater	5,250	72,919	125	1,736		0.0%	3,000	50,162 53,162		
MESAVERDE MESAVERDE	0						Sückwater Flamp Sückwater Flamp	1.5		Sliciowater Sliciowater	3.000 26.753	75,919 99,672	71 637	1.808 2.373	28.3%	3.0%	46.818	99,980		
MESAVERDE	0						Flush (4-1/2")			400-cmayer	5,328	105,000	127	2,500	202.0	. 40.0 //	10,0,0	99,980	li J	- 2
MESAVERDE	0						ISOP and 5 min ISOP					105,000		15					1	2
MESAVERDE MESAVERDE	0																			
MESAVERDE	0									Sand Isden V	loiume	94,422				930				
			a vezet	0.7027573.5							Chr. IC.	25200000		lush depth	8161	galm	4,496 CBP depth	4,761	the sandift 129	
	21		# of Perfs	ustage	45	50.0	<< Above pump time	(min)						lusn depth	0101		сър цериі	0,032	123	183
MESAVERDE		7898		4		Varied	Pump-in test	(1100)		Slickwater		0	0	0						
MESAVERDE MESAVERDE	5	7958 7998		4	16		ISIP and 5 min ISIP Slickwater Pad			Stickwater	11,044	11.044	263	263	15.0%	0.0%	0	0		,
MESAVERDE	- 1	7000	No Perfs	(1)	1/2	50	Slickwater Ramp	0.25		Shickwator	20.861	31,905	497	760	28 3%	16.6%	13.038	13.038	li i	3
MESAVERDE	2		No Perfs				SW Sweep	0		Stickwater	. 0	31,905	0	760	200	0.0%	.0	13.038		
MESAVERDE	4		No Perfs				Slickwater Ramp SW Sweep	1 0		Slickwater Slickwater	20.861 5.250	52,766 58,016	497 125	1,256 1,381	28.3%	33.2%	26,076	39 114 39 114		3
MESAVERDE MESAVERDE	13		No Perts				Slickwater Ramp	0.5		Sackwater	3.000	61,016	71	1,453		3.6%	3,000	42,114		1 3
MESAVERDE	1		No Perfs			50	Slickwater Ramp	1.5		Säckwater	20.861	78.877	497	1,878	28.3%	46.4%	36,507	78.621	0	l ŝ
MESAVERDE	3		No Perfs			50	Flush (4-1/2")				5,123	84,000	122	2,000				78,621		-
MESAVERDE MESAVERDE	8		No Perfs No Perfs				ISDP and 5 min ISDP	1				84,000								,
MESAVERDE	1		No Perfs									yearan								
MESAVERDE	.5		No Perfs							Sand laden V	olume	73,627				Charles	4.494	4.000	Bee was only	
	66		# of Parts	/stage	40									lush depth	7848	gal/ft	1,124 CBP depth		fibe sand/ft 90	
ARCH ALBRANE		***			Inst		Above pump time	(mn)		Stickwato+			0	0	1	012	No.		10000	100
MESAVERDE MESAVERDE	0	7624 7718		3	30	Varied 0	Pump-in tost ISIP and 5 min ISIP			olickwate)		0	0	0						
MESAVERDE	9	.,,,0	No Perfs		~	50	Slickwater Pad			Stickwater	18,949	18 949	451	451	15.0%	0.0%	0	. 0		1
MESAVERDE	8		No Peris				Slickwater Ramp	0,25		Stickwater	35,793	54 742	852	1,303	28.3%	16.9%		22,370		- 5
MESAVERDE MESAVERDE	6		No Perfs No Perfs		1	50	5W Sweep Stickwater Ramp	0	1.5	Stickwater Stickwater	5.250 35.793	59.992 95.784	125 852	1.428 2.281	28.3%	0.0% 33.7%	44.741	22,370 67,111		1 2
MESAVERDE	0		No Perfs				SW Sweep	0		Slickwater	10,500	106 284	250		2011/8	0.0%	0	67,111		1 8
MESAVERDE	2		No Porfs			50	Säckwater Ramp	0.5	1.5	Blickwater	3,000	109 284	71	2.602	422.00	2.3%	3.000	70,111		1 5
MESAVERDE MESAVERDE	6		No Perfs			50	Slickwater Ramp Flush (4-1/21)	1.5	2	Slickwater	35.793 4,944	142,077 147,021	852 118	3,383 3,500	28.3%	47.2%	62,637	132,748 132,748		1
MESAVERDE MESAVERDE	15		No Peris			50	ISOP and 5 min ISOF				7,277	147,021	110	3,300				132,140		- 2
MESAVERDE	40		No Peris									,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								
MESAVERDE	0				1						latera and a	100.000								
MESAVERDE	0									Sand Isdon V	- Diame	126,327				gal/ft	2,005	2,107	lbe sand/ft	
	63		# of Perf	sistage	42									lush depth	7574	1.50	CBP depth	7,480	54	
MESAVERDE	0	7368	7372	- 4	10	67.7 Varied	Above pump time Pump-in test	(min)		Sackwater		0	0	0						
MESAVERDE	11	7444		4	24		ISIP and 5 min ISIP					-					1,00	200		
MESAVERDE	2		No Perfe		500	50	Slickwater Pad			Slickwater	11.105	11,105	264	264	15.0%	0.0%	0	0	ľ. Ú	3
MESAVERDE	2		No Perts				Sickwater Ramp	0.25		Stickwater	20.976	32,081	499		28.3%	16.6%	13,110	13,110 13,110		100
MESAVERDE MESAVERDE	9		No Perfs				SW Sweep Sickwater Ramp	1		Säckwater Säckwater	20,976	32,081 53,056	499		28 3%	33.2%	26,220	39.330		1
MESAVERDE	o		No Perts			50	SW Sweep	0	0	Slickwater	5,250	58,306	126	1.388		0.0%	0	39.330	1	8
MESAVERDE	1		Ne Perts				Slickwater Ramp	0.5		Stickwater	3,000	61,306	71	1,460	05.00	3.8%	3,000	42.530		1 8
MESAVERDE MESAVERDE	17		No Perfs No Perfs			50	Slickwater Ramp Flush (4-1/2*)	1.5	2	Sickwater	20,976 4,777	79,282 84,059	499 114	1,888	28.3%	46.4%	36,708	79,037 79,037		3
MESAVERDE	5		No Ports				IEDP and 5 min ISDF				390000	84,059	7.15	Street.						1
MESAVERDE	0		No Perts																	
MESAVERDE MESAVERDE	9		No Ports							Sand laden \	laturna Inturna	74,032								
					/325					Summanuer V		1.47000	V/	William Street		gal/ft	903	964	Ibs sand/ft	
	82		# of Perf	s/stage	40	37.8	<< Above pump time	(min)	-		-		211	Flush depth	7318		CBP depth	7,132	184	TO S
MESAVERDE	2	7092	7102	- 4	40	Varied		and.		Stickwater		0	0	. 0						
MESAVERDE	0		No Perfs	700		0	ISIP and 5 min ISIP					350		93						
MESAVERDE	9		No Ports				Stickwater Part	0.00		Stickwater	8,768 16,561	8,768 25,329	209 394		15.0%	17.2%	10,351	10.351		3
MESAVERDE MESAVERDE	1		No Perfs				Stickwater Ramp SW Sweep	0.25	1 0	Stickwater	16.561	25,329	394	603	26.3%	0.0%		10.351		
MESAVERDE	18		No Ports				Silskwater Ramp	1	1.5	Slickwater	16,561	41,890	394	997	28.3%	34.5%	20.701	31,052		1 3
MESAVERDE	2		No Perfs			50	SW Sween	0	. 0	Slisiovater	0	41,590	0	997		0.0%	0	31,052		
MESAVERDE MESAVERDE	1 16		No Perfs			50	Slickwater Ramp	0,5		Stickwater Stickwater	16 561	41,890 58,451	394		28.3%	0.0% 48.3%	28,982	31,052 60,034		
MESAVERDE	16		No Perfs				Flush (4-1/2")	3,3	, ×	- ATTACKNOOT	4,597	63,046	109		20.0%	140,350	80,202	60,034		
MESAVERDE	0					100	ISDP and 5 min ISDF				27.5	63,048								-
MESAVERDE	0																			
MESAVERDE MESAVERDE	0									Sand laden V	/olumn	58.451						(5)-(397-5)	5.5 DE-	
en santai			Modern								(C-55-5)	CONTRACT.		District Control	20.40	galift	1,205	1,238	lbs sand/ft	
	49		# of Perf	ustage	40	27.8	<< Above pump time	(min)					- 11	Flush depth	7042	- 200	CBP depth	0,010	1,022	
WASATCH	19	5970	5880	7.4	40	Varied	Pump-in test			Slickwater		0	0	0						
WASATCH WASATCH	0		No Perfs No Perfs				Slickwater Pad			Slickwater	5.720	5.720	136	136	15.0%	0.0%		- 26		- 9
WASATCH	0		sea s. aus				Slickwater Ramp	0.25	1	Stickwater	10.805	16,525	257		28,3%	15.2%		8,753		1 7
WASATCH	0					50	SW Sweep	0	0	Silickwater	0	16,525	0	393		0.0%	0	6,753		11.8
WASATCH	0						Slickwater Ramp	1		Slickwater	10,805		257		28.3%	30.3%				
WASATCH	0					50	SW Sweep Slickwater Ramp	0.5		Slickwater Slickwater	0	27,330 27,330	0			0.0%		20 259		
WASATCH	0					50	Slickwater Ramp	1.5		Slickwater	10,805	38,135	257	908	28.3%	54.5%		44_571		1 S
WASATCH	9					50	Flush (4-1/2")	100		LIET, TONOTO	3,865	42,000	92	1,000	75088	1 - an	100000	44,571		
WASATCH	0						ISDP and 5 min tSDF					42,000								
WASATCH	0											.c. 40***								
WASATCH	0									Sand ladon \	/olume	38,135				254	2.054	2 400		
	19		# of Perf	s/stage	40	V) (20 10 V								 Flush depth	5920	gavh	CBP depth	5,920	libs sand/ft 0	LOO
						18.2		100		-	Total Fluid	520,351	E 1411	12,503	(200	SIE.	Total Sand	494,991		723
Totals	299				247															



Kerr-McGee Oil & Gas Onshore LP PO Box 173779 DENVER, CO 80217-3779

February 13, 2009

Mr. Dustin Doucet Utah Division of Oil, Gas and Mining 1594 West North Temple, Suite 1210 P.O. Box 145801 Salt Lake City, Utah 84114-5801

Re:

State 1021-32I NWSW Sec. 32, T10S-R21E API Well No. 4304739134 Uintah County, Utah

Dear Dustin,

In accordance with R649-3-22, "Completion Into Two or More Pools", please be advised that there are no contiguous owners in oil and gas leases or in drilling units overlying the pool we intend to commingle to notify. As evidenced by the enclosed plat, Kerr-McGee Oil & Gas Onshore LP is the sole working interest owner in all contiguous leasehold.

Please let me know if anything further is required in order to approve the sundry submitted to you regarding the recompletion of the State 1021-32I. I have enclosed a copy of the sundry notice.

Thank you for your attention to our request.

Sincerely,

KERR-McGEE OIL & GAS ONSHORE LP

Jason Rayburn

Landman

enclosures

RECEIVED FEB 1 9 2009

) ss

)

COUNTY OF UINTAH )

#### **AFFIDAVIT**

Jason Rayburn, of lawful age, and being first duly sworn upon oath, deposes and says:

He is a Landman of Kerr-McGee Oil & Gas Onshore LP, of Denver, Colorado. Kerr-McGee Oil & Gas Onshore LP is the operator of the following described well:

## STATE 1021-32I 2208' FSL, 1231' FEL (NESE) SECTION 32, T10S- R21E UINTAH COUNTY, UTAH

Kerr-McGee Oil & Gas Onshore LP the only owner in the well and/or of all the contiguous oil and gas leases or drilling units overlying the pool.

On the 13th day of February 2009, he placed in the United States mail, with postage prepaid, a copy of the attached Application for Commingling into two or more pools (formations) in one wellbore for the subject well.

Said envelope which contained these instruments was addressed to the Utah Division of Oil, Gas & Mining.

Further affiant saith not.

Jason Rayburn, Affiant

Subscribed and sworn before me this 13th day of February, 2009.

STATE OF COLORADO

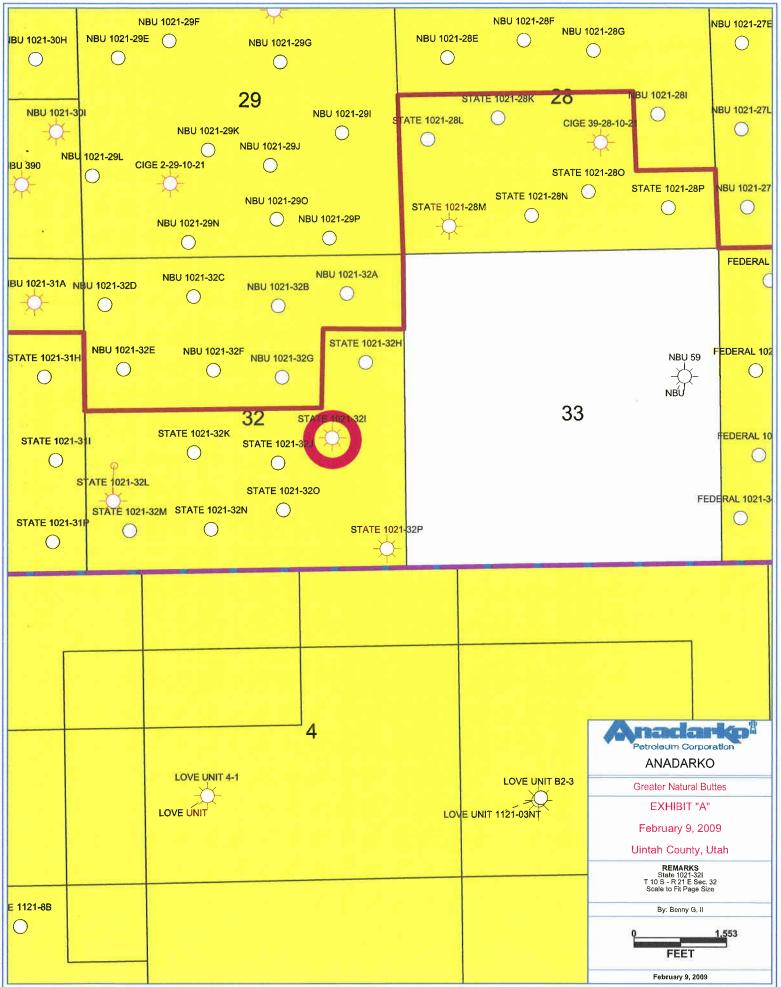
My Commission Expires Aug. 16, 2009

JODI DOLLARD NOTARY PUBLIC

110000

My Commission Expires:

Aug. 16, 2009



	STATE OF UTAH		FORM 9				
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINII	NG	5.LEASE DESIGNATION AND SERIAL NUMBER: ML-21577				
SUNDE	RY NOTICES AND REPORTS O	N WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:				
Do not use this form for proposottom-hole depth, reenter plu DRILL form for such proposals.	7.UNIT or CA AGREEMENT NAME:						
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: STATE 1021-32I						
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSI		9. API NUMBER: 43047391340000					
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th S	treet, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES				
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2208 FSL 1231 FEL			COUNTY: UINTAH				
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: NESE Section: 32	P, RANGE, MERIDIAN: Township: 10.0S Range: 21.0E Meridian: S		STATE: UTAH				
11. CHE	CK APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPORT,	OR OTHER DATA				
TYPE OF SUBMISSION		TYPE OF ACTION					
	ACIDIZE	ALTER CASING	CASING REPAIR				
NOTICE OF INTENT	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME				
Approximate date work will start:	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE				
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION				
5/5/2010	OPERATOR CHANGE	PLUG AND ABANDON	☐ PLUG BACK				
SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION				
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON				
	UBING REPAIR	VENT OR FLARE	WATER DISPOSAL				
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION				
	☐ WILDCAT WELL DETERMINATION ✓	OTHER	OTHER: DRILL OUT PLUG				
12. DESCRIBE PROPOSED OR CO	MPLETED OPERATIONS. Clearly show all pertin	ent details including dates, depths, vo	olumes, etc.				
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  THE SUBJECT WELL WAS RECENTLY RECOMPLETED TO THE  WASATCH/MESAVERDE FORMATIONS. THE ISOLATION PLUG AT ~8300' WASAccepted by the  DRILLED OUT AND 2-3/8" TUBING WAS LANDED AT 8693'. THE EXISTING Utah Division of  MESAVERDE PERFORATIONS ARE NOW COMMINGLED WITH THE NEWLYOII, Gas and Mining  WASATCH/MESAVERDE FORMATIONS. PLEASE SEE ATTACHED FOR RECORD ONLY  CHRONOLOGICAL WELL HISTORY.  NAME (PLEASE PRINT)  PHONE NUMBER  TITLE							
Andy Lytle	720 929-6100	Regulatory Analyst					
SIGNATURE N/A		<b>DATE</b> 5/6/2010					

US ROCKIES REGION										
			0	perat	ion S	umma	ary Report	t .		
Well: STATE 10	)21-32l		Spud C	onductor	: 6/6/200	08	Spud Date: 6/8	8/2008		
Project: UTAH-	UINTAH		Site: ST	ATE 102	1-321		Rig Name No: MILES-GRAY 1/1, LEED 733/733			
Event: RECOM	PL/RESERE\	/EADD	Start Da	ate: 3/12/2	2010		End Date: 3/19/2010			
Active Datum: I	RKB @5,322.	00ft (above Mear	n Sea Leve	UWI: S	TATE 10	021-32I		'		
Date	Time Start-En		Phase	Code	Sub Code	P/U	MD From (ft)	Operation		
3/12/2010	7:00 - 7:		COMP	48		Р		HSM, ROADING RIG & EQUIP ON MUDDY ROADS.		
	7:30 - 15		COMP	30	Α	Р		MIRU F/ NBU 1022-3E1. SELL WELL DWN TO PRODUCTION EQUIP, SDFWE		
3/15/2010	7:00 - 7:		COMP	48		Р		HSM, CHECKING WELL FOR H2S.		
	7:30 - 15		COMP	31	I	Р		FCP 75 STP 75, CONTROL TBG & CSG W/ 60 BBLS 2%, ND WH NU BOPS, RIG UP FLOOR. UNLAND TBG IT WAS PARTLEY STUCK PULLED TO 50,000# IT CAME FREE. POOH S.L.M & CHECKING W/ BROACH W/ 282 JTS 23/8 J-55, L/D BTM 6 JTS W/ SCALE ON OD & ID. L/D X/N W/ BUMPER SPRING INSIDE. SWI SDFN.		
3/16/2010	7:00 - 7:		COMP	48		Р		HSM, WORKING W/ WIRE LINE		
	7:30 - 10	:00 2.50	COMP	34	ı	Р		SICP 200 PSI, RU CASED HOLE SOLUTIONS, RIH W/ 41/2: GAUGE RING TO 8350', POOH RIH SET BAKER 10K CBP # 8295' POOH.		
	10:00 - 11	1.00	COMP	33	С	Р		ND BOPS, NU FRAC VA;LVES, FILL CAG W/ 80 BBLS & TEST CSG & VALVES TO 6,000# PSI, RD B&C.		
	11:00 - 15	:00 4.00	COMP	34	Н	Р		( STG 1 ) RIH W/ 31/8" EXP GNS, 23 GRM, ,36 HOLES, 90 DEG PHASING & PERF 8216'-8226' 4SPF 40 HLS. POOH SWI PREP TO FRAC IN AM.		
3/17/2010	6:30 - 7:		COMP	48		Р		HSM, WORKING W/ FRAC & PERORATING CREWS.		
	7:00 - 7:		COMP	36	Е	Р		MIRU SUPERIOR, PRIME UP PUMPS & LINES, PRESSURE TEST SURFACE LINES TO 7,000# PSI. (STG 1) WHP 740 PSI, BRK @ 5985 PSI, @ 4.7 BPM, ISIP 2768 PSI, FG .78. PUMPED 100 BBLS @ 48.4 BPM, @ 5262 PSI = 70% PERFS OPEN. MP 5673 PSI, MR 49.3 BPM, AP 4961 PSI, AR 43.8 BPM, ISIP 2544 PSI, FG .75. NPI -224 PSI, PMPD 819 BBLS OF SW, & 18,732 LBS 30/50 SND & 5000 LBS OF 20/40 RESIN SAND. TOTAL PROP 23,732 LBS.		
	7:50 <b>-</b> 9:	24 1.57	COMP	36	E	Р		( STG 2 ) PU 41/2" CBP & 31/8" EXP GNS, 23 GRM, .36" HOLES, 90 DEG PHASING. SET CBP @ 7758' & PERF 7724'-7728' 4 SPF, 16 HLS. 7692'-7694' 4 SPF, 8 HLS. 7624'-7628' 4 SPF, 16 HLS. 70TAL 40 HOLES. WHP 1270 PSI, BRK @ 4513 PSI, @ 5 BPM, ISIP 2066 PSI, FG .71. PUMPED 100 BBLS @ 47.4 BPM, @ 4912 PSI = 62% PERFS OPEN. MP 5579 PSI, MR 50.2 BPM, AP 4851 PSI, AR 45.7 BPM, ISIP 2974 PSI, FG .83. NPI 908 PSI, PMPD 963 BBLS OF SW, & 25,264 LBS 30/50 SND & 5000 LBS OF 20/40 RESIN SAND. TOTAL PROP 30,264 LBS.		

#### **US ROCKIES REGION Operation Summary Report** Spud Conductor: 6/6/2008 Spud Date: 6/8/2008 Well: STATE 1021-32I Project: UTAH-UINTAH Site: STATE 1021-32I Rig Name No: MILES-GRAY 1/1, LEED 733/733 Event: RECOMPL/RESEREVEADD Start Date: 3/12/2010 End Date: 3/19/2010 Active Datum: RKB @5,322.00ft (above Mean Sea Leve UWI: STATE 1021-32I Date P/U Phase Code MD From Time Duration Sub Operation Start-End Code (hr) (ft) 9:24 (STG 3) PU 41/2" CBP & 31/8" EXP GNS, 23 GRM, - 10:42 1.30 COMP 36 Ε Р .36" HOLES, 90 DEG PHASING. SET CBP @ 7536' & PERF 7504'-7506' 4 SPF 8 HLS. 7444'-7448' 4 SPF 16 HLS. 7388'-7389' 4 SPF 4 HLS. 7378'-7381' 4 SPF 12 HLS. TOTAL 40 HOLES. WHP 1235 PSI, BRK @ 5230 PSI, @ 5 BPM, ISIP 2565 PSI, FG .78. PUMPED 100 BBLS @ 49.3 BPM, @ 5300 PSI = 71% PERFS OPEN. MP 5698 PSI, MR 50. BPM, AP 5189 PSI, AR 48.3 BPM, ISIP 2818 PSI, FG .82. NPI 253 PSI, PMPD 853 BBLS OF SW, & 25,115 LBS 30/50 SND & 5000 LBS OF 20/40 RESIN SAND. TOTAL PROP 30,115 LBS. 10:42 - 12:06 1.40 COMP 36 Е Ρ (STG 4) PU 41/2" CBP & 31/8" EXP GNS, 23 GRM, .36" HOLES, 90 DEG PHASING. SET CBP @ 7154' & PERF 5968'-5978' 4 SPF 40 HLS. TOTAL 40 HOLES. WHP 920 PSI, BRK @ 2394 PSI, @ 5.3 BPM, ISIP 1995 PSI. FG .72. PUMPED 100 BBLS @ 49.5 BPM, @ 4650 PSI = 72% PERFS OPEN. MP 5225 PSI, MR 50.2 BPM, AP 4495 PSI, AR 49.4 BPM, ISIP 3173 PSI, FG .88. NPI 1178 PSI, PMPD 1084 BBLS OF SW, & 37,563 LBS 30/50 SND & 5000 LBS OF 20/40 RESIN SAND. TOTAL PROP 42.563 LBS. 12:06 - 13:27 (STG 5) PU 41/2" CBP & 31/8" EXP GNS, 23 GRM, 1.35 COMP 36 Ε .36" HOLES, 90 DEG PHASING. SET CBP @ 6008' & PERF 7119'-7124' 4 SPF 20HLS 7098'-7103' 4 SPF 20 HLS. TOTAL 40 HOLES. WHP 210 PSI, BRK @ 1631 PSI, @ 4.1 BPM, ISIP 1146 PSI, FG .63. PUMPED 100 BBLS @ 49.8 BPM, @ 3908 PSI = 63% PERFS OPEN. MP 5511 PSI, MR 50.2 BPM, AP 3981 PSI, AR 48.5 BPM, ISIP 2415 PSI, FG .84. NPI 2415 PSI, PMPD 996 BBLS OF SW, & 39,473 LBS 30/50 SND & 5000 LBS OF 20/40 RESIN SAND. TOTAL PROP 44,473 LBS. 13:27 - 15:00 1.55 COMP 34 Ρ (KILL PLUG) RIH W/41/2" BAKER CBP & SET @ 5918' POOH.RD W/L & FRAC CREW. 15:00 - 18:00 3.00 COMP 31 Ρ ND FRAC VALVE, NU BOPS RU FLOOR. PU RIH W/ Т 37/8 BIT, PUMP OPEN SLEVE, 1.875 X/N & 188 JTS 23/8 J-55. TAG KILL PLUG @ 5918', L/D 1 JT RU DRL EQUIP, EOT @ 5883 'SWI SDFN. Ρ 3/18/2010 7:00 - 7:30 0.50 COMP 48 HSM, WORKING W/ POWER SWIVEL & PRESSURE.

#### **US ROCKIES REGION Operation Summary Report** Spud Conductor: 6/6/2008 Spud Date: 6/8/2008 Well: STATE 1021-32I Project: UTAH-UINTAH Site: STATE 1021-32I Rig Name No: MILES-GRAY 1/1, LEED 733/733 Event: RECOMPL/RESEREVEADD Start Date: 3/12/2010 End Date: 3/19/2010 Active Datum: RKB @5,322.00ft (above Mean Sea Leve UWI: STATE 1021-32I Date P/U Phase Code MD From Time Duration Sub Operation Start-End Code (hr) (ft) 7:30 - 15:00 SICP 0, BREAK CIRC CONVENTIONAL, TEST 7.50 **COMP** 44 С Р BOPS TO 3,000# PSI, RIH C/O 0' OF SAND TAG 1ST PLUG @ 5918' DRL PLG IN 8 MIN 300# PSI INCREASE RIH. C/O 30' OF SAND TAG 2ND PLUG @ 6008' DRL PLG IN 8 MIN 200# PSI INCREASE RIH. C/O 30' OF SAND TAG 3RD PLUG @ 7154' DRL PLG IN 11 MIN 200# PSI INCREASE RIH. C/O 0' OF SAND TAG 4TH PLUG @ 7536' DRL FOR 2 HRS NOT MAKING ANY HOLE, TRYED TO DRY DRILL STILL NO LUCK BIT APEARS TO BE WORN OUT. LD 2 JTS 23/8 EOT @ 7501' TURN WELL OVER TO FB CREW TO FLOW WELL OVER NIGHT, SO WE CAN TRIP BIT IN AM. 7:00 - 7:30 3/19/2010 0.50 COMP 48 Р HSM, TRIPPING TBG. 7:30 - 11:00 3.50 **COMP** 31 Ρ CSG FLOWING TO FB TNK. POOH W/ 184 JTS 23/8, CONTROL CSG W/ 10 BBLS 30# BRINE, LET PUMP TRICKLE, POOH W/ REM 56 JTS L/D BHA, ALL THREE CONES WERE GONE. PU NEW PUMP OPEN BIT SUB & 37/8 FANG MILL, RIH W/ 240 JTS 11:00 - 17:00 6.00 COMP C Ρ RU SWIVEL. BREAK CIRC CONVENTIONAL. C/O 0 ' OF SAND TAG 4TH PLUG @ 7536' DRL PLUG IN 15 MIN, 300 # PSI INCREASE RIH. C/O 30 ' OF SAND TAG 5TH PLUG @ 7758' DRL PLUG IN 36 MIN, 200 # PSI INCREASE RIH. TO 8270' NOTHING TAGGED, LD 3 JTS, LAND TBG ON 260 JTS 23/8 J-55. RD FLOOR ND BOPS, DROP BALL, NU WH. PUMP OPEN BIT SUB. TURN WELL OVER TO FB CREW. RDMOL. MOVE TO STATE 1021-32L & PARKED SDFWE. KB=16' 41/16 10 K HANGER = .83' 260 JTS 23/8 J-55 = 8163.66' 1.875 X/N & PUMP OPEN BIT SUB, 37/8 FANG MILL = 4.04'EOT @ 8184.53' X/N @ 8180.49' L/D 21 JTS FROM WELL. BTM 6 W/ SCALE. TWTR 3293 BBLS 7:00 -33 7 AM FLBK REPORT: CP 100#, TP -#, OPEN/64" CK, Α 15 BWPH, HEAVY SAND, - GAS TTL BBLS RECOVERED: 1712 BBLS LEFT TO RECOVER: 3363 7:00 -7 AM FLBK REPORT: CP 950#, TP 380#, 32/64" CK, 3/20/2010 33 Α 25 BWPH, MED SAND, - GAS TTL BBLS RECOVERED: 2918 BBLS LEFT TO RECOVER: 2157 7:00 -3/21/2010 33 Α 7 AM FLBK REPORT: CP 2250#, TP 0#, OPEN/64" CK, 0 BWPH, MED SAND, - GAS TTL BBLS RECOVERED: 2943 BBLS LEFT TO RECOVER: 2132

#### **US ROCKIES REGION Operation Summary Report** Spud Conductor: 6/6/2008 Spud Date: 6/8/2008 Well: STATE 1021-32I Project: UTAH-UINTAH Site: STATE 1021-32I Rig Name No: MILES-GRAY 1/1, LEED 733/733 Event: RECOMPL/RESEREVEADD End Date: 3/19/2010 Start Date: 3/12/2010 Active Datum: RKB @5,322.00ft (above Mean Sea Leve UWI: STATE 1021-32I Date Phase P/U Time Duration Code Sub MD From Operation Start-End Code (hr) (ft) 3/23/2010 7:00 7 AM FLBK REPORT: CP 1625#, TP 860#, 20/64" CK 33 Α 28 BWPH, MED SAND, - GAS TTL BBLS RECOVERED: 3351 BBLS LEFT TO RECOVER: 1724 7:00 -7 AM FLBK REPORT: CP 1200#, TP 600#, 24/64" CK 3/24/2010 33 Α 12 BWPH, LIGHT SAND, 800 GAS TTL BBLS RECOVERED: 3726 BBLS LEFT TO RECOVER: 1349 9:00 **PROD** 50 WELL TURNED TO SALES @ 0900 HR ON 3/24/10 -1250 MCFD, 360 BWPD, CP 1540#, FTP 750#, CK 24/64" 3/25/2010 7:00 7 AM FLBK REPORT: CP 1000#, TP 575#, 24/64" CK 33 Α 13 BWPH, TRACE SAND, 1.1 GAS TTL BBLS RECOVERED: 4015 BBLS LEFT TO RECOVER: 1060 7:00 3/27/2010 **PROD** 50 WELL IP'D ON 3/27/10 - 1193 MCFD, 7 BOPD, 88 BWPD, CP 897#, FTP 524#, CK 25/64", LP 94#, 24 7:00 -5/3/2010 WO/REP 30 Ρ [DAY 1] JSA MOVING RIG & EQUIPMENT. ROAD RIG FROM NBU 920-23D TO STATE 1021-32i. MIRU, SPOT EQUIPMENT. EOT @ 8184'. FTP=200#, SICP=200#. BLEW WELL DOWN. KILL TBG W/ 20 BBLS 2% KCL. NDWH, NUBOP. R/U FLOOR & TBG EQUIPMENT. UNLAND TBG. L/D HANGER. POOH STDG BACK 2-3/8" J-55 TBG. [SLM] L/D BHA. SEEN NO SCALE, (LIGHT EXTERNAL PITTING ON PIPE) KILL WELL 3X TO GET TBG OUT. P/U 3-7/8" FREE BAKER EXPERMINTAL MILL & RIH OUT OF DERRICK ON TBG. EOT @ 8290'. KILL 1X WHILE RIH. LTR=100 BBLS MIRU WTFRD FOAM UNIT. 5PM SWI-SDFN. PREP TO D/O ISOLATION PLUG IN AM.

#### **US ROCKIES REGION Operation Summary Report** Spud Conductor: 6/6/2008 Spud Date: 6/8/2008 Well: STATE 1021-32I Project: UTAH-UINTAH Site: STATE 1021-32I Rig Name No: MILES-GRAY 1/1, LEED 733/733 End Date: 3/19/2010 Event: RECOMPL/RESEREVEADD Start Date: 3/12/2010 Active Datum: RKB @5,322.00ft (above Mean Sea Leve UWI: STATE 1021-32I Date P/U Time Phase Code MD From Duration Sub Operation Start-End (hr) Code (ft) 5/4/2010 7:00 P [DAY 2] JSA FOAM UNITS & DRLG. WO/REP 30 EOT @ 8280'. SITP=200#, SICP=1000#. R/U SWVL & FOAM / NITROGEN UNIT. ESTABLISH CIRCULATION W/ 2% KCL WATER IN 45 MINUTES. C/O 15' SAND. TAG BAKER 10K CBP @ 8295'. D/O CBP IN 3 MINUTES, SETTING DN 8PTS. 50# INCREASE. FCP=150#. RIH, TAG SCALE @ 8324'. C/O 10' LIGHT SCALE. RIH, TAG SCALE @ 8847'. C/O 20' LIGHT SCALE, RIH, TAG SCALE @ 8968'. C/O 20' LIGHT SCALE. RIH, TAG SCALE 9100'. MILL PLUGGED OFF. DRY DRILL & C/O TO 9112'. B.P @ 9105'. [7'RATHOLE] R/D SWVL. POOH & L/D 9 JTS. RETREIVE STRING FLOAT. CONTINUE POOH STDG BACK TBG. L/D MILL. FOUND GREY SOFT SCALE IN MILL AND JT ABOVE MILL, L/D SCALE JT, KILL WELL 2X WHEN POOH W/ 40 BBLS TOTAL. RDMO FOAM / NITROGEN UNIT. P/U GOOD USED N.C. W/ XN & RIH OUT OF DERRICK ON 2-3/8" J-55 TBG. EOT @ 2575'. LTR= 60 BBLS. LEAVE WELL OPEN TO SALES. 5 PM SDFN 5/5/2010 7:00 - 17:00 7AM [DAY 3] JSA BROATCHING TBG. 10.00 COMP FCP=250, EOT @ 2575'. BLEW WELL DN. KILL TBG W/ 20 BBLS. CONTINUE TO RIH ON 2-3/8" TBG. LAND TBG ON HANGER W/ 276 JTS J-55. EOT @ 8693.53' & XN @ 8691.33'. TBG WAS BROATCHED. R/D FLOOR & TBG EQUIPMENT. NDBOP, NUWH. RACK EQUIPMENT. RDMO TO NBU 1021-1"O". KILL 3X WHILE RIH. LEAVE WELL OPEN TO SALES. LTR= 0 BBLS

SIAILV	LOIVII
DEPARTMENT OF NAT	FURAL RESOURCES
DIVISION OF OIL, O	BAS AND MINING

**ENTITY ACTION FORM** 

perator:	1/11/1/1	McGEE OIL & GAS ON	NOTIONE LF	Operator Account Number: N 2995					
ddress:	1368 S	OUTH 1200 EAST							
<u> </u>	city VE	RNAL							
<u> </u>	state U	Т	zip 84078	Phone Number:					
Well 1									
API Num	ber	Well	Name	QQ	Sec	Twp	Rng	County	
Various		NBU REVISION						UINTAH	
Action Co	ode	Current Entity Number				te		tity Assignment Effective Date	
E		Various		3/13/201	2	3/1/2012			
Comments:	MOVI	E THE ATTACHED WE 12012. 72 W.C.	ELLS INTO THE NATI	JRAL BUT	TES UN	IT REVI	SION EF	731/3012	
API Number		Well	Name	QQ	Sec	Twp	Rng	County	
Action Co		Current Entity Number	New Entity Number	s	pud Dat			lity Assignment Effective Date	
Action Co	ode			S	Spud Dat				
Comments:	ode :	Number		QQ	Spud Dat				
Comments:	ode :	Number	Number	QQ		Twp	Rng	Effective Date	

**ACTION CODES:** 

A - Establish new entity for new well (single well only)

**B** - Add new well to existing entity (group or unit well)

C - Re-assign well from one existing entity to another existing entity

D - Re-assign well from one existing entity to a new entity

E - Other (Explain in 'comments' section)

**RECEIVED** 

**REGULATORY ANALYST** 

SHEILA WOPSOCK

Title

Signature

Name (Please-Print)

5/30/2012

Date

(5/2000)

MAY 3 1 2012

# Entity Action Form Attachment for wells moved into the Natural Buttes Unit Effective 02/01/2012.

orial entity								
API	Well Name	QTR/QTR JSection	TWNSHP	RANGE	Producing Intervals			
4304737079	FEDERAL <u>92</u> 0-251	NESE 15431	25 98	20E	WASATCH/MESAVERDE			
4304737080	FEDERAL 920-25H	SENE 15761	25 9S	20E	WASATCH/MESAVERDE			
4304737081	FEDERAL 920-25A	NENE 15553	25 9S	20E	WASATCH/MESAVERDE from MV			
4304739098	STATE 1021-28M	swsw /6499	28 10S	21E	WASATCH TO WSMVD			
4304737918	FEDERAL 1021-26L	NWSW 16390	26 10S	21E	MESAVERDE TO WS 7M/D			
4304737919	FEDERAL 1021-26N	SESW 16391	26 10S	21E	WASATCH/MESAVERDE			
4304737916	FEDERAL 1021-250	SWSE 14277	25 10S	<u>21</u> E	WASATCH/MESAVERDE			
4304739112	STATE 1021-31M	swsw 16454	31 105	21E	WASATCH TO WSMVD			
4304739127	STATE 1021-32P	SESE /6471	32 10S	21E	WASATCH/MESAVERDE			
4304739128	STATE 1021-320	SWSE 17513	32 10S	_21E	WASATCH/MESAVERDE			
4304739131	STATE 1021-32L	NWSW 16902	32 10S	21E	WASATCH/MESAVERDE			
4304739133	STATE 1021-32J	NWSE 17529	32 10S	21E	WASATCH/MESAVERDE			
4304739134	STATE 1021-321	NESE 16905	32 10S	21E	WSMVD			
4304739135	STATE 1021-32H	SENE 17528	32 10S	21E	WASATCH/MESAVERDE			
4304735714	FEDERAL 1022-29H	SENE /5/47	29 10S	22E	WASATCH/MESAVERDE			
4304735715	FEDERAL 1022-29F	SENW 15162	29 10S	22E	WASATCH/MESAVERDE			
4304735716	FEDERAL 1022-29B	NWNE 114982	29 10S	22E	WASATCH/MESAVERDE			
4304735737	FEDERAL 1022-291	NESE 15001	29 10S	22E	WASATCH/MESAVERDE			
4304735738	FEDERAL 1022-29D	NWNW 15016	29 105	22E	MESAVERDE TO WS TOVD			
4304734862	FEDERAL 31-10-22	SESE 13879	31 10S	22E	MESAVERDE TO WSTMVD			
4304735173	FEDERAL 1022-31D	NWNW 14/32	31 10S	22E	WASATCH/MESAVERDE			
4304736492	FEDERAL 1022-31N	SESW 14255	'31 10S	22E	WASATCH/MESAVERDE			
4304736493	FEDERAL 1022-311	NESE 15089	31 10S	22E	WASATCH/MESAVERDE			
4304736494	FEDERAL 1022-31G_	SWNE 15075	31 10S	22E	WASATCH/MESAVERDE			
4304736495	FEDERAL 1022-31F_	SENE 1523D	31 10S	22E	WASATCH/MESAVERDE			
4304736574	FEDERAL 1022-31C_	NENW 15090	31 10S	22E	WASATCH/MESAVERDE			
4304736575	FEDERAL 1022-31J_	NWSE 15214	31 10S	22E	WASATCH/MESAVERDE			
4304736576	FEDERAL 1022-31L	NWSW 16276	31 10S	22E	WASATCH/MESAVERDE			
4304734317	STATE 1-32	NESW 13419	32 10S	22E	WASATCH/MESAVERDE			
4304734831	STATE 2-32	SESW 13842	32 10S	22E	MESAVERDE TO WSMID			
4304734832	STATE 3-32	NWSW 13844	32 10S	22E	WASATCH/MESAVERDE			
4304735095	STATE 1022-32J	NWSE 11+097	32 10S	22E	WSMVD			
4304735096	STATE 1022-32A	NENE 13914	32 10S	22E	WASATCH/MESAVERDE			
4304735186	STATE 1022-32P	SESE 14131	32 10S	22E	MESAVERDE TO WSMVD			
4304735315	STATE 1022-320	SWSE 14114	32 10S	22E	WASATCH/MESAVERDE			
4304735647	STATE 1022-32H	SENE 14348	32 10S	22E	MESAVERDE TO WSMVD			
4304736413	STATE 1021-360	SWSE /5619	36 10S	21E	WASATCH/MESAVERDE			
<b>¥</b> 4304738157	WELL BELONGS TO	QEP ENERGY CORP "	GH 8-20-8-21"	PERMIT NO	T APPROVED			
4304734839	FEDERAL 1022-15F	SENW 14618	15 10S	22E	WASATCH/MESAVERDE			
4304736414	STATE 1021-36J	NWSE 15651	36 10S	21E	WASATCH/MESAVERDE			
4304738152	STATE 1021-36L	NWSW 16012	36 10S	21E	WASATCH/MESAVERDE			
4304735440	FEDERAL 1022-15J	NWSE 14617	15 10S	22E	WASATCH/MESAVERDE			
4304736415	STATE 1021-36I	NESE 15684	36 10S	21E	WASATCH/MESAVERDE			
4304738845	STATE 1021-36D	NWNW 16455	36 10S	21E	WASATCH/MESAVERDE			

4304750096 FEDERAL 1022-27H	SENE 17626	27 10S	22E	WASATCH/MESAVERDE
4304736416 STATE 1021-36H	SENE 15335	36 10S	21E	WASATCH/MESAVERDE
4304738846 STATE 1021-36E	SWNW 16523	36 10S	21E	WASATCH/MESAVERDE
4304735676 FEDERAL 1022-28L	NWSW 15110	28 10S	22E	WASATCH/MESAVERDE
4304736417 STATE 1021-36G	SWNE 15291	36 10S	21E	WASATCH/MESAVERDE
4304738847 STATE 1021 <u>-36F</u>	SENW 16394	₹36 10S	21E	WASATCH/MESAVERDE
4304735713 FEDERAL 1022-28N	SESW 15145	28 10S	22E	WASATCH/MESAVERDE
4304736418 STATE 1021-36B	NWNE 14953	36 10S	21E	WASATCH/MESAVERDE
4304738848 STATE 1021-36N	SESW 16359	36 10S	21E	WASATCH/MESAVERDE
4304735735 FEDERAL 1022-280	SWSE 15285	28 10S	22E	WASATCH/MESAVERDE From MURD
4304736419 STATE 1021-36A	NENE /5035	36 10S	21E	WASATCH/MESAVERDE
4304738849 STATE 1021-36K	NESW 16084	36 10S	21E	WASATCH/MESAVERDE
4304735736 FEDERAL 1022-28M	swsw 15286	28 10S	22E	WASATCH/MESAVERDE
4304736420 STATE 1021-36P	SESE 15372	36 10S	21E	WASATCH/MESAVERDE
4304738850 STATE 1021-36C	NENW /6396	36 10S	21E	WASATCH/MESAVERDE
4304734861 FEDERAL 29-10-22	SESE 14006	29 10S	22E	MESAVERDE TO WSMVD
4304735577 FEDERAL 1022-330	SWSE 15080	33 10S	22E	WASATCH/MESAVERDE
4304735739 FEDERAL 1022-33E	SWNW 15193	33 10S	22E	WASATCH/MESAVERDE
4304735740 FEDERAL 1022-33M	swsw /5373	33 10S	22E	WASATCH/MESAVERDE
4304735741 FEDERAL 1022-33L	NWSW /551/	33 10S	22E	WASATCH/MESAVERDE
4304735742 FEDERAL 1022-33G	SWNE 15404	33 10S	22E	WASATCH/MESAVERDE From MURD
4304735743 FEDERAL 1022-33C	NENW 15405	33 10S	22E	WASATCH/MESAVERDE
4304735744 FEDERAL 1022-33A	NENE /5539	33 10S	22E	WASATCH/MESAVERDE
4304737105 FEDERAL 1022-33D	NWNW 16502	33 10S	22E	WASATCH/MESAVERDE
4304737106 FEDERAL 1022-33F	SENW 16560	33 10S	22E	WASATCH/MESAVERDE From WSTC
4304737107 FEDERAL 1022-33K	NESW 16124	33 10S	22E	WASATCH/MESAVERDE
4304737109 FEDERAL 1022-33N	SESW /6/26	33 10S	22E	WASATCH/MESAVERDE
4304737110 FEDERAL 1022-33B	NWNE /6561	33 <b>1</b> 0S	22E	WASATCH/MESAVERDE
4304735810 STATE 1021-36E	SWNW 14395	36 10S	21E	WASATCH/MESAVERDE